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Nos. 90, 91

In the Supreme Court of the United States

OCTOBER TERM, 1946

**NATIONAL LEAD COMPANY, TITAN COMPANY, INC.,
APPELLANT**

v.

THE UNITED STATES OF AMERICA

**E. I. DU PONT DE NEMOURS AND COMPANY,
APPELLANT**

v.

THE UNITED STATES OF AMERICA

**ON APPEALS FROM THE DISTRICT COURT OF THE UNITED
STATES FOR THE SOUTHERN DISTRICT OF NEW YORK**

BRIEF FOR THE UNITED STATES

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BRIEF FOR THE UNITED STATES

OPINION BELOW

The opinion of the district court (R. 185) is reported in 63 F. Supp. 513.

JURISDICTION

The judgment of the district court was entered on October 11, 1945 (R. 307). The Government's

petition for appeal and the separate cross appeals of the defendants were all filed and allowed on April 18, 1946 (R. 329, 334, 335, 350).

The jurisdiction of this Court is conferred by Section 2 of the Act of February 11, 1903, 32 Stat. 823, 15 U. S. C., sec. 29, and Section 238 of the Judicial Code, as amended by the Act of February 13, 1925, 43 Stat. 936, 938, 28 U. S. C., sec. 345. Probable jurisdiction was noted on May 20, 1946.

QUESTIONS PRESENTED

The questions presented by du Pont in No. 91 are: (1) Whether the finding of the district court that du Pont was a party to the unlawful combination is supported by the evidence; and (2) whether the district court had the power to require du Pont to disclose to a licensee under paragraph 7 of the judgment, the methods and processes used by du Pont at the date of the license in its commercial practice under the licensed patents in connection with the production of titanium pigments; and, if such power exists, whether the district court abused its discretion in compelling such disclosure in this case.

The first question presented by No. 91 will be considered in point I and the second question in point II herein.

The questions presented by National Lead in No. 90 are: (1) Whether paragraphs 5 and 6 of the judgment, which enjoin the performance of

contracts found to be in violation of the Act and the making of contracts comparable in purpose and effect, have been or could be shown unduly to restrict the right of National Lead to enter into necessary and proper contracts; (2) whether the district court should not have compelled the defendants to license any applicant royalty free under their existing patents and patent applications and all patents issued within 5 years; (3) whether National Lead should be prohibited from owning jointly with some of its foreign co-conspirators certain foreign producers of titanium pigments; and (4) whether National Lead should have been required to divest itself of certain of its physical properties and facilities.

The first of these questions will be considered as point III herein and the third question as point IV.

As to the second point, the Government agrees with National Lead that the defendants should not be permitted to exact royalties for the use of the patents which have been abused. Its argument in support of this position is contained in its brief in No. 89, pp. 54-121. The Government, unlike National Lead, has not contended that, under the facts of this case, the defendants should be enjoined from enforcing patents issued within five years from the date of the judgment, unless issued on a pending application. The fourth question presented by National Lead will

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not be discussed in this brief, since it is considered in the Government's brief in No. 89, pp. 131-144.

STATEMENT

The brief for the United States in No. 89, this Term, pp. 4-40, contains a Statement of most of the facts pertinent to the issues raised by the appeals in No. 90 and No. 91. Such additional facts as are necessary will be set forth in the Argument.

SUMMARY OF ARGUMENT

I

The evidence supports the finding that DP was a party to the unlawful conspiracy. DP, the largest domestic producer of lithopone, was aware of the threat of titanium pigments to its lithopone business. Therefore, in 1931, it purchased the assets of Commercial Pigments, the only domestic producer of titanium pigments other than NL.

Prior to the purchase of CP by DP, plans were already under way for a world-wide patent pool. These plans could be carried out only if an arrangement was made between the American producers. The arrangement then being considered by the American producers, CP and NL, was a cross-licensing of patents, the exclusionary effect on potential competition of such an arrangement being specifically recognized. The consummation of the plans for a world-wide patent pool was postponed and not effected until after DP and NL entered into the 1933 agreement.

NL was prevented by Article XIV of the 1920 agreement from executing the agreement with DP until NL had secured the approval of its foreign associates. IG, NL's German associate, refused to give its approval on the ground that the agreement did not clearly indicate that DP would respect its exclusive territorial rights. It requested that NL "clearly" express "in some form" that it would do so. DP wrote an ambiguous letter to NL referring to its inability to make "any commitments" in view of the antitrust laws, but stating that the results would be satisfactory to "your foreign associates." NL, after conferences with DP, wrote a letter to IG construing and interpreting the DP letter as satisfactorily replying to the request of IG. This letter was shown to and read by DP. Jebesen, NL's foreign representative, then forwarded these letters to IG along with a letter written by him in which he stated that DP had verbally expressed to him the same views as were contained in the NL letter. IG replied, noting the assurances of DP and NL that they would respect the TG territory and, "relying on this loyal promise," approved the agreement.

After the execution of the agreement, DP cooperated with the members of the combination. It exchanged technology with NL's foreign associates; exchanged patents and patent applications on a royalty-free basis with them; and did not export to the exclusive markets of NL's foreign

associates. On the other hand, it did not exchange technology with VC and Zirconium, its American licensees; refused to exchange future patents with Zirconium, and drastically limited their production. Its competition with NL is restricted and does not affect the price structure.

The District Court found that although du Pont had not agreed with TP or NL that it would refrain from exporting titanium pigments into TG's territory and that it would grant NL's foreign associates exclusive licenses under DP's foreign patents, in order to obtain the consent of IG to Exhibit E, DP gave assurances that as a practical matter such exports would not take place and that the practical effect of its conduct would produce substantially identical results as if it did so agree to grant exclusive licenses. It carried out these assurances in accordance with the expectations of the other conspirators. Such knowing and intentional cooperation with other conspirators for mutual benefit was clearly sufficient to support the finding that du Pont was a party to the conspiracy. Binding commitments such as are required by the law of contracts are obviously not necessary. *Interstate Circuit v. United States*, 306 U. S. 208. The NL-DP agreement of 1933 was not a lawful interchange of patents such as was permitted in *Standard Oil Co. (Indiana) v. United States*, 283 U. S. 163. The setting and effect of the agreement by itself and in conjunction with other understandings and the conduct of the parties

clearly brings it within the caveats in the *Standard Oil* case that patent pooling where domination exists or which effects a monopoly is unlawful.

II

The provision in the judgment requiring du Pont at the request of a licensee to impart in writing the methods and processes used by it in its commercial practice under the licensed patents was neither beyond the power of the district court nor an abuse of discretion. Such relief was essential if effective competition is to enter the industry. Defendants, prior to 1940, exchanged such information among themselves. A large and inseparable portion of du Pont's technology was acquired as a result of the unlawful combination.

III

National Lead does not demonstrate that paragraphs 5 and 6 of the judgment, *infra* p. 79, impose unjustified restrictions on its right to contract in the future. Paragraph 5 enjoins the further performance of existing contracts found to be unlawful. The challenged portion of paragraph 6 merely enjoins the entering into of any agreement or plan having the purpose or effect of continuing or renewing any of the agreements the further performance of which was enjoined in paragraph 5. The requested enlargement of the proviso in paragraph 6 to include producers has not been shown to be necessary.

IV

NL contends that paragraph 8 of the judgment constitutes an abuse of the trial court's discretion. Paragraph 8 prohibits NL from continuing with certain of its coconspirators jointly to own certain foreign corporations engaged in the titanium pigment business. These jointly owned corporations were formed in furtherance of a purpose of NL to protect the markets allocated to it by the 1920 agreement and to strengthen its position in the domestic market vis-a-vis potential domestic competitors. The continued joint ownership of these corporations will have the necessary effect of preventing the growth of foreign competition. That the prohibition will not stifle foreign competition is immaterial since it is the duty of the court to remove unlawful obstacles to the emergence of competition. It is unnecessary to consider if the joint ownership arrangements standing alone would be unlawful since the court has power to prohibit arrangements which would be lawful apart from the conspiracy. Here the joint ownership was used as an effective means of restraining trade and the restraint will continue if the prohibition is eliminated. NL claims that the prohibition will cause it a financial loss. Even if this be true it is immaterial since effective relief cannot be granted without the prohibition.

ARGUMENT

I

DP WAS A PARTY TO THE UNLAWFUL CONSPIRACY AND EQUALLY RESPONSIBLE WITH NL FOR THE UNLAWFUL RESTRAINTS IMPOSED UPON THE INTERSTATE AND FOREIGN COMMERCE OF THE UNITED STATES

The district court found that DP became a party to the unlawful combination (R. 289). It further found that a common purpose of DP and NL in entering into the agreement of 1933, Exhibit E, was to strengthen their patent position in the industry to the exclusion of all others, and that an effect of the agreement was to give DP and NL together domination and control over the titanium pigment business in the United States (R. 291-292). These findings are amply supported by the evidence.

- 1. DP entered the industry by purchasing a competitor, a purpose being the protection of its lithopone business*

Prior to its entry into the titanium pigment business, DP, the largest producer of the competitive pigment lithopone (RE. 961), had become increasingly aware of the threat of titanium pigments to its position in the pigment market. It was of the opinion that "lithopone has apparently reached its maximum and a decline in lithopone business is indicated" while "titanium pigments are of increasing importance" (RE. 1049). It recognized that there was a direct relation

between the price of lithopone and titanium pigments and that reductions in the price of titanium dioxide would require reductions in the price of lithopone (RE. 1067). At this time the price of titanium dioxide had already dropped from 40¢ a pound in 1928 to 20¢ a pound in 1931 (R. 1149-1150).¹ In addition, CP estimated its production costs at 7.65 cents per pound (R. 1111), and believed that it could be sold at a satisfactory profit for 12 cents per pound (R. 1036).

During the years immediately preceding 1931, DP had several times discussed with NL and CP a close association in the manufacture of titanium pigments (RE. 1049). NL was not then receptive to DP's overtures. However, CP became receptive after DP commenced development work (RE. 1049). DP, after an extensive and exhaustive survey of the titanium pigment industry in February 1931, concluded that, if it continued its program of independent action in this field, a capital expenditure of more than two and one-half million dollars for the construction of a commercial plant, etc., would be required in the next two years and that, by that time, the two American producers "would be firmly in the saddle with established business so that the entrance of du Pont in the field with a large plant could only mean lower prices and our plant operated at only part capacity for some time" (RE. 1051). Unquestionably, a purpose of DP in

¹ The price lists therein referred to, Exhibits 24 and 42, were not printed but are a part of the record.

entering the industry by purchasing, in July 1931, the assets of CP, an actual competitor in the pigment field and a potential competitor in the titanium pigment field, was to prevent a substantial decline in the price of titanium pigments and a consequent decline in the price of lithopone. The effectuation of this purpose would necessarily require cooperative competitors.

2., The world-wide pooling of patents and commercial cooperation between the titanium producers of the world were aided by the DP cooperation with the combine.

At and prior to the time DP was negotiating for the business of CP, the companies operating in the United States and the rest of the world under the Barton-Rossi-Jebesen patents and under the Blumenfeld patents were engaged in negotiations for a pooling of patents and technical information and for further cooperation. A tentative agreement had been worked out by representatives of all of the producers at a meeting in Paris in March 1931. It was recognized, however, that a world-wide combination of producers could only occur if the two American producers "enter into some agreement as regards patents and development in the U. S. either by a combination of companies or by cross-licensing agreement" (RE. 1271).²

²The United States producers were considering a cross-licensing of their respective patents. An advantage of such an arrangement was stated to be the establishment of a "stronger position of both as against a possible third com-

The acquisition by DP of the business of CP, one of the two American producers, did not terminate the negotiations for a world-wide patent pool and commercial understanding; the consummation of the world-wide arrangements was merely deferred until *after* a satisfactory agreement had been worked out between the two American producers. This was in accord with the understanding reached at the Paris conference.

3. *DF was willing to aid in the negotiations abroad in order to secure the kind of pooling agreement it desired in the United States*

In August 1931 Rupprecht was elected president of the new DP company "Krebs," which took over the assets of CP (R. 587). Tichnor and Chase, directors of Krebs, continued to maintain the contacts previously established by them with the European companies. Blumenfeld was advised that the "whole situation will be strengthened" (RE. 3619). They explained to Dr. Jensen, NL's foreign representative, at a meeting in London in September 1931 that the acquisition of CP by DP would "in no way impair the planning of a coming together of their and our group—it would rather further the matter" (RE. 1224). Mr. Ewing, manager of the DP London pany" (RE. 1271). It was recognized that the combined patents would present "a very formidable set-up against anyone attempting to enter the titanium field" (RE. 1563). However, negotiations between NL and CP were held in abeyance pending the Paris conference (RE. 953).

office, was present at this meeting. After similar assurances from Chase and Tichnor, Dr. Blumfeld was willing to await the outcome of continued conversations between DP and NL in the United States (R. 1225). That such conversations were continued in the United States is evident. Jebson was advised in December 1931 by NL that Chase and his associates "would like to secure a working arrangement in the United States and in order to get it are willing to be of any assistance they can in helping us to secure a similar arrangement in Europe" (RE. 768).³

By January 1932, the DP interest in an exchange of licenses in the United States was becoming keener as Jebson was then informed by NL "the du Pont interests as well as the Commercial Solvent people seem very keen on the exchange of licenses in this country" (R. 1234).⁴

³Jebson had been previously advised by NL in November 1931 that an agreement between the two American producers in the form of a license could be very easily arranged (RE. 1232).

⁴While the district court found that Chase and Tichnor, the directors of Krebs, were without authority from DP, there is nothing in the record to indicate that they did not have authority to act in the negotiations for DP. The district court apparently felt the burden of proof was on the Government to show actual authority and the fact that they were directors of Krebs was immaterial (F. 71, R. 278). The record nevertheless discloses that DP desired an exchange of licenses with NL and the inference is inescapable that they were at least conducting negotiations in an unofficial capacity and with the knowledge of DP, for as directors of Krebs their only interest in the matter could be that connected with the interests of Krebs.

It is significant that Barton, the inventor of the Barton patents and one of the founders of the industry, expressed the opinion to NL in February 1932, that the future of the titanium pigment industry depended more on the technical and business initiative and aggressive development than upon patent protection.

Chase and Tichnor, having assured Blumenfeld "that du Pont would continue the conversations with National Lead Company" (RE. 1225, 3619), and the groundwork having been fully laid for further negotiations between DP and NL, Rupprecht, the president of Krebs, thereupon continued further negotiations with NL. These negotiations which commenced in April 1932, resulted in the agreement of 1933, Exhibit E. It is important to note that NL advised DP of the

* He informed NL in February 1932 that "future progress in the titanium-pigment industry will probably depend more on technical and business initiative and aggressive development than upon patent protection; and in any arrangement for pooling interests the chief advantages will probably result from the exchange of technical information and cooperation relative to construction, operation, purchase of raw materials and marketing" (R. 1249). This is of import since the 1933 DP-NL agreement provided for an exchange between NL and DP of technical information on an unlimited basis within the licensed field. The Government regards the Barton comment as to the future of the titanium-pigment industry as significant since it contends that the 1933 agreement was essentially and principally a commercial arrangement and that one of the principal purposes and objects thereof was to give DP and NL joint domination and control of this industry. The district court found this to be one of the necessary effects of the agreement (R. 292).

restrictive license agreement which NL had with its foreign associates in May 1932 (RE. 1286). It is also clear that by this time DP had apparently discussed other things with NL than merely settling patent disputes, for NL advised Rupperecht at the time the plant inspections commenced that "there are some things which you have in mind that will have to be held in abeyance for development" (RE. 1286).

1. The negotiations leading to the 1933 agreement

The negotiations for the agreement took the form of the settlement of a patent infringement controversy. Plans were made whereby the two companies would send representatives to inspect the plants and plant operations of the other for the apparent purpose of determining whether either company was infringing patents of the other (RE. 1283). In accordance with the plan, representatives of the two companies visited the respective plants of the other (RE. 1290, 1295). These plant visits went beyond a mere investigation for alleged infringement and covered an exchange of information relating to technical problems or "know how" of the industry (RE. 3651-3731), which was unrelated thereto. For example, DP informed NL in June 1932 that (RE. 3651):

* DP kept no records of the negotiation with NL other than those introduced in evidence. It is impossible therefore to tell what Rupperecht had in mind except as his subsequent conduct may throw some light on this statement.

For conveying barium sulphide solution, most economical service has been had from a five-ply water hose furnished by Sibley Hose and Rubber Company. Two-and-one-half-inch hose is used mostly for pressure lines. There is in service now a test section of "Newtype Cord Suction Hose" furnished by Sibley Hose and Rubber Company which is proving very satisfactory for gravity flow lines where ordinary hoses collapse.

It is also significant that though DP was not producing composite pigments at this time, the inspection of the NL plant by DP covered these operations even though DP had informed NL it did not intend to manufacture composite pigments until it was "free to do so through patent expiration" (RE. 1289-1290). This was a recognition by du Pont that the composite field would be patent free in 1934. The conclusion, therefore, is inescapable that these plant visits were in fact for the purpose of initiating the exchange of technical information before the signing of the agreement therefor.

Further, if the negotiations and subsequent agreement were for the purpose of settling a patent controversy, it would seem that DP would have ascertained who owned the patents alleged to have been infringed by it. That DP was not concerned about such a vital consideration is clear by reference to the patents which NL claimed DP infringed. NL claimed that DP infringed nine

patents (RE. 1297) in the total field of approximately one hundred patents in this industry. DP claimed NL infringed eight of its patents (RE. 1313). A total of seventeen patents therefore constituted the field of the "controversy" which was purportedly settled by the 1933 cross-licensing agreement. Seven of the nine patents involved were not owned by TP (the party granting the release for infringement) but were in fact owned by Titan A/S (RE. 3743). DP never received a license from this company to use the seven patents alleged to be infringed, nor does the record show that it ever received a release for any alleged past infringement of these seven patents. It is submitted, therefore, that whatever "controversy" might have existed as to seven of the nine patents which it was alleged DP infringed, it was not settled by Exhibit E or any subsequent agreement to which DP was a party.

The failure of DP to concern itself with the legal ownership of the patents which it was charged with infringing was not merely an oversight. One of Rupprecht's advisors in these negotiations specifically directed his attention to the necessity of determining title to the patents involved, in April 1933, when he wrote: "I am also

The eight DP patents involved will not be considered herein as only NL would be concerned with title to those patents and no claim is made that DP did not own the patents it claimed were infringed by NL. As to any infringement claim based on these patents NL obviously secured a valid release.

assuming, as I have stated previously, that you know for a fact that the Titanium Pigment Company owned the various patents under which you desire to obtain licenses * * * (RE. 1459). [Italics supplied.] Rupperecht merely replied to this note of caution that he had been informed that all of the patents on titanium pigments were owned by the Titanium Pigment Company and not NL (RE. 1461). Thus what should have been of primary concern to the negotiators of a patent-settlement agreement was not even regarded as sufficiently important by Rupperecht to warrant a check of the matter after the question of title had been specifically called to his attention. Such conduct on the part of Rupperecht definitely belies du Pont's contention that these negotiations were conducted at arm's length and that such was in fact DP's relation with NL and the other members of the combination at all times.*

It was also decided in this "patent infringement inquiry," that the validity of patents was

* Titanium Pigment Company was the NL company that executed the 1933 agreement with Krebs, the DP subsidiary (F. 11, R. 239; F. 10, R. 238).

* The two remaining patents which it was alleged DP infringed were of no practical consequence. Number 1,196,031 was issued in 1916 and contained but a single claim and expired on the day the 1933 agreement was executed. DP had concluded in June 1931 that the last of the nine patents (No. 1,338,473) was of doubtful validity and easy to avoid (RE. 1180). DP naturally denied any infringement whatever of the aforesaid nine patents (RE. 1387).

not to be questioned except as a last resort (RE. 1373, 1387). It was even suggested that one of the patents alleged to be infringed might be valid "in respect to the operations of all others than ourselves and the du Pont Company" (RE. 1364) because of the long industrial use of the subject matter by NL prior to the date of the patent. A further consideration bearing upon the claim that Exhibit E was for the purpose of settling a patent controversy, is the fact that DP had made an exhaustive survey of the patent situation in the industry and knew that the patents upon which NL's business was originally founded would expire in 1932 and 1934 and that NL had failed to enforce against CP any claims for patent infringement (Edgs. 37, 72, R. 248, 279, RE. 1038-9, 1171).

DP and NL negotiated an agreement acceptable to them, herein referred to as Exhibit E (R. 69). Its provisions are summarized in the Statement in the brief for the United States, No. 89, this Term, pp. 26-29. Like the negotiations, the agreement was cast in the form of a settlement of a patent controversy. As stated by the district court in its opinion (R. 214):

Carefully, they cast the agreement into the form of a settlement of patent disputes. The disturbing fact about that instrument is that despite the high professional skill

expended upon it, its terms are, in important respects, so vague that upon the trial, counsel for NL and counsel for DP did not agree upon its meaning. It is clear, and I believe not disputed, that the 1933 writing is far from the lawyer's ideal of clarity and precision. The only explanation which the record affords for this unexpected obscurity is contained in a letter from Mr. Beschorman to NL's English associates, that *the vagueness in the writing is deliberate and the product of fear of the anti-trust laws.* [Italics supplied.]

In view of the requirements of Article XIV of the 1920 agreement, it was necessary to secure the approval of NL's foreign associates before the contract could be executed. The German associate of NL, IG, objected to the proposed contract. It stated in a letter to Jebsen, dated June 20, 1933 (R. 1479):

We have carefully examined how this contract affects the interest-sphere of Titangesellschaft, and it seems to us, that at least one important point in the new contract has not been clearly expressed, namely that Krebs unconditionally have to respect the territory reserved Titan-gesellschaft in the License Agreement of October 1927 between Titan Co A/S and Titangesellschaft, that is that Krebs—

- (a) Shall not themselves manufacture in the territory of Titangesellschaft,
- (b) Shall not make deliveries in this territory,

(c) Shall also impose upon their customers a corresponding obligation not to deliver in this territory,

(d) Shall grant sublicenses only to undertakings outside this territory and for use outside of this territory,

(e) Shall strictly observe the same limitation as under (d) also regarding the experiences of which they get knowledge and which originate from Titangesellschaft,

We consider it of the greatest importance to have this point made clear, as otherwise the unbearable situation may arise for the Titangesellschaft, that Krebs compete with Titangesellschaft in the latter's territory, with T. G.'s own patent-rights and experiences which are transmitted to Krebs through Titanium Pigment Company.

The wording of Art. 5 paragr. 2 of the new agreement does not so far quite correspond with (cover) the above-mentioned basic principle, that Krebs shall not grant any licenses within the territory of Titangesellschaft and/or to be made use of for this territory, inasmuch as the term "nonexclusive license" has been used. Further, it would better correspond to the spirit of the agreement between Titangesellschaft and Titan Co A/S, if such licenses were granted Titangesellschaft free of cost, it should then be (es sei denn) that Krebs acknowledge, that also they have to pay to T. G. a corresponding compensation for the use of patent-rights originat-

ing from T. G., as it, according to information from Mr. Beschorman, seems to be intended, without we being able hitherto to find a confirmation of this in the agreement. The above-mentioned basic principle that, according to the spirit of the contract between T. G. and Titan Co A/S, Titangesellschaft should be granted a license free of cost under the Krebs patents, applies also to new inventions as such naturally practically always will result from the experiences resulting from the cooperation Krebs/Titanium Pigment Co/Titangesellschaft.

We should be obliged if Titanium Pigment Co. could give us a certain reassurance also with regard to these points.

Jebsen of NL discussed the proposed contract with the German company and advised NL by cable dated June 22, 1933, that IG would approve the proposed contract provided DP would "clearly" express "in some form" that it would respect IG's territory (RE. 1482).¹⁰ This message was conveyed to Rupprecht of DP by NL. After several conversations with NL, Rupprecht drafted a reply dated June 28, 1933 (RE. 1483) and delivered it to NL personally. At this time he told

¹⁰ He also wrote NL on June 23 that, "Mr. Weber-Andrease seemed to have a fairly good knowledge of the way of cooperation between du Pont and I. C. I. He considered it, though, necessary to have a clear statement from du Pont about the important points,—not necessarily embodied in the agreement, but for instance by exchange of letters between National Lead Company and du Pont" (RE. 1475).

NL that "it was a selling job for them to make IG realize that they were putting their interests in National Lead's hands, and that they would be well taken care of" (RE. 1486). Rupprecht's letter (Ex. 267, RE. 1483) was as follows:

KREBS PIGMENT & COLOR CORPORATION

Confidential

June 28, 1933.

W. C. BESCHORMAN,
Vice Pres., National Lead Company,
111 Broadway, New York City, N. Y.

DEAR MR. BESCHORMAN: We have considered the various points raised by I.G. in their cable to you with the desire, if possible, to comply with its request.

As you are aware, the Anti-Trust Laws of this country definitely prevent this Corporation from making any commitments respecting the territories of Titangesellschaft and Titan, Inc. Further, these several companies are not parties to the Krebs-Titanium Pigment Agreement and so, as to them, we are unable to make any direct commitment. However, since Article II of the Krebs-Titanium Pigment Agreement definitely provides that Krebs is limited both in respect to use and sale to the territories set forth in this Article, we think the result will be eminently satisfactory to your foreign associates. As to controlling the disposition of our products by our customers, we are sure you appreciate the diffi-

culty both from a legal and practical standpoint.

The I. G. request that Krebs grant no sub-licenses or technical aid to others in the territories of the foreign companies, is tantamount to obligating Krebs to grant exclusive licenses. The whole agreement, you will recall, for definite reasons, was placed on a non-exclusive basis. Since all licenses received from Krebs under its foreign patents, are subject to negotiation, we believe there will be no difficulty in working out a solution that will be acceptable to all parties; it may well be that such negotiations will result in exclusive licenses to your foreign associates. Naturally, we shall treat technical information in the same manner as our patents.

The present form of our Agreement is the result of much care and thought on the part of both parties. It embodies, as we see it, a practicable working basis for both companies, as well as for your foreign associates.

Very truly yours,

C. H. RUPPRECHT,
President.

CHR:

A letter dated July 12, 1933 (Ex. 271, RE. 1491) was prepared by NL, and shown to (Ex. 271, RE. 1490) and read by Rupprecht before it was sent to IG. This letter read as follows:

July 12, 1933.

I. G. FARBENINDUSTRIE, Aktiengesellschaft,
Frankfurt (Main), Grüneburgplatz.

DEAR SIRs: Immediately upon receipt of cablegram of June 22nd from Dr. Jebsen,

copy of which is attached, we took the matter up with the Krebs Pigment & Color Corporation, submitting to them a copy of the cable, and take pleasure in handing you copy of their reply under date of June 28th. Careful reading of the Krebs letter will surely indicate to you the spirit in which they are entering into this contract and their efforts to meet your views. We feel that experience will prove that such will be the case.

In regard to the phrase "non-exclusive license" to which you call our attention as occurring in Article 5, Paragraph 2, we have to refer to the United States Anti-Trust Laws which absolutely forbid the granting of exclusive license between two manufacturers in the United States as such a practice would tend to create a monopoly. Therefore, the use of this phrase "non-exclusive license" is simply to comply with the United States Laws and in practice the licenses under each others patents will undoubtedly prove to be, for all intents and purposes, exclusive.

Referring subsequently to the points brought out in your letter of June 20th, under A, B, C, D and E, you will note that the Krebs Company consider themselves limited both as to use, manufacture and selling to the territory granted to them by the agreement. While this agreement does not specifically prevent Krebs from exporting into your territory any products not manufactured under the patents of the Titanium

Pigment Company and its associated companies, it will be a difficult matter to discriminate between such manufacture and manufacture under their patents and maintain close and good cooperation, and the practical effect will be that Krebs will refrain from such export.

As to exports by clients of the Krebs Company, we note that Krebs will use all their efforts to prevent any export outside of their territory which would cause any trouble to you in any way.

In regard to licenses, although non-exclusive licenses are specified throughout the agreement, you will note from the letter of Krebs Company that they are not adverse to granting exclusive licenses in case this may be found desirable by you. Under the practice, as we foresee it, these licenses will be given against a nominal payment except in cases of outstanding development.

We also see your point, that by the exclusive license you have given Titan Co., Inc., which has granted exclusive licenses to the Titanium Pigment Co., Inc., you are not in position to trade with Krebs regarding any American patents belonging to you. However, you may rest assured that your interest in these respects, which are also our own interests in view of our part ownership in the Titangesellschaft, will be fully and completely looked after.

At one time we considered the question of an agreement between the Titangesellschaft and Krebs covering the points in your letter,

but have dropped this idea as we felt that you would be better served to have us look after your interests than to complicate the situation with a separate contract.

The only other point in your letter which we do not believe has been covered is your suggestion that the contract be changed from termination in three years to termination in five years. Frankly, there is no possibility of the contract being terminated at any time that we can foresee, and I am glad that you did not make any especial point of this either in the cable or in your letter of June 20th.

May I add that we certainly appreciate your attitude and the views you have put forward in your letter to Dr. Jebesen and trust that you will not be disappointed in the future by following the lines we have suggested. May we ask further advice from you as to whether the Krebs letter and above make the whole matter satisfactory.

Very truly yours,

Executive Vice President.

Copy to—

Dr. KUHNE

Dr. JEBSEN

Mr. RUPPRECHT

Mr. TASKER, Vice Chairman, British
T. P. Co.

A copy of this letter to IG was mailed to DP by NL on July 17. It was not found in the DP files (R. 215).

The Rupprecht letter of June 28 and the NL letter of July 12 were sent to IG with an accompanying letter dated July 21 from Jebson, the foreign manager of NL. This letter (Ex. 274, RE. 1502) was as follows:

July 21, 1933.

DR. H. K. HNE:

I enclose copy of my letter of today to I. G. Farbenindustrie Aktiengesellschaft transmitting a letter from Mr. W. C. Beschorman, copy of which also is enclosed, dealing with the various points raised in the letter from I. G. Farbenindustrie of June 20th to me regarding the contemplated agreement between Titanium Pigment Company, Inc. and Krebs Pigment and Color Corporation.

I have met Mr. Rupprecht, President of Krebs Pigment and Color Corporation, who verbally has expressed to me the same views as to the future cooperation which has been expressed by Mr. Beschorman.

Considering the views and interpretations as expressed by Mr. Beschorman, and by Mr. Rupprecht in his letter to Mr. Beschorman, it seems to me that a cooperation can be looked to which will be of important benefits to Titangesellschaft.

It is considered desirable to treat the matter strictly confidential.

At the time NL transmitted the Rupprecht letter to IG, it requested IG to advise NL as to whether the Rupprecht letter and the NL letter made the matter satisfactory (RE. 1498). IG replied on August 7 that it had noted the assurances of both NL and DP that they "will loyally respect the delimitations as regards manufacture, granting of licenses and sale, which are fixed in the agreement between Titan Company and Titangesellschaft," and, "relying on this loyal promise, we renounce on [sic] the formal confirmation of the wishes expressed in our letter of June 20th, 1933, * * *"¹¹ (RE. 1516, 1479).

¹¹ DP contends in its brief that the District Judge made a mistake of fact in attributing to DP what it describes as a very damaging phrase, i. e., "that DP will loyally respect the territory of TG." The District Judge did not say that this phrase was found in the letter of June 28 from DP to NL or in the letter of July 12 from NL to IG. He stated that the IG letter of August 7 consenting to the agreement early indicated that IG had accepted the letters as an assurance that both NL and DP "will loyally respect" the territory of TG. The Court was obviously referring to the fact that IG had read the two letters and had "discovered" therein the assurances and commitments they had asked for from DP and which DP had obviously intended to convey. The District Judge was obviously placing the phrase in quotes for emphasis as "DP" as such was never mentioned in any of the correspondence, although IG was aware that Krebs was a DP subsidiary. The language referred to by DP was contained in the opinion of the court (R. 218) and any doubt as to the fact that the court was there giving a reasonable construction to the language in the Rupprecht and NL letters is shown by his Finding 73 (R. 288) wherein he stated:

"IG construed the communications to mean that Krebs will loyally respect the territorial delimitations as regards manu-

The two NL letters and the Rupprecht letter thus secured the approval of the foreign associates of NL to the 1933 contract which in form did not comply with Article XIV of the 1920 contract.

Rupprecht of DP anticipated and was convinced that his letter and the NL letters would together secure their intended result, that is, the approval of IG to Exhibit E. Rupprecht indicated in a letter of July 25 to the DP Foreign Relations Department *before the actual notice of approval was in fact received from IG* that the DP Foreign Relations Department might proceed to notify the London Office of the Contract, as final approval of the contract by IG was expected any day. Rupprecht expressly stated in this letter that he thought that IG's questions had been "satisfactorily answered" (RE. 1509).¹²

facture, granting of licenses and sale, which are fixed in the agreement' between Tinc and TG; and in reliance thereon, withdrew its objections to the agreement/Exhibit E."

¹² In the letter of the DP Foreign Relations Department concerning Exhibit E, to the DP London manager (RE. 1506), the DP Foreign Relations Department pointed out that Exhibit E limited the territory of DP's manufacturing operations to the United States with rights to sell in the United States, Central and South America.

It was also suggested in this letter that the DP London manager advise ICI of the agreement and that CIL may still acquire the Blumenfeld patents in Canada and if they desire to do so, "it is quite possible that further negotiations with NL would result in extending the present arrangement to Canada" (RE. 1508). CIL, in which DP had a 45% interest, was a vehicle for many DP operations in Canada, and it ultimately did enter into a contract with NL whereby CTP

Jebsen described the arrangement entered into between DP and NL and the other producers as a result of these letters and his conversation with Rupprecht in October 1933, in his "Short Outline Regarding the Relations in the Titanium Industry." In this outline he referred to the arrangement between DP and NL and stated: "It is understood that the Krebs Corp. will not manufacture or sell outside the American continent" (RE. 1533). He consistently maintained and asserted this position in his writings (RE. 1953, 3070).

Other evidence also indicates the nature of Rupprecht's assurance or commitment of July 1933. Dr. Blumenfeld had conversations with Rupprecht at that time. He testified that the proposed agreement between the European producers was discussed with Rupprecht and Chase at that time and that the substance of his conversation with Rupprecht about that subject was that DP would not export into the territories of the European producers (R. 790, 791, 821, 827-8, RE. 2063).

was created to handle the Canadian market (RE. 342). CTP acquired the Blumenfeld rights in Canada from LaPorte when it purchased the Canadian business of that company in 1937 (F. 58, R. 269).

It was this DP letter (RE. 1506) which brought forth the comment of its London manager in his letter advising ICI of the American agreement between DP and NL that "we look upon this patent pool as a definite advance in cooperation and the strengthening of both parties' position to the exclusion of outsiders" (RE. 1510).

¹³ The cartel agreements between the competing European

The DP letter of June 28 was prepared by Rupprecht and Hanley of the DP legal department and thereafter personally delivered by Rupprecht to the NL representative (RE. 1487) for transmission to the other members of the combine, who held the power to withhold the benefits desired by DP, for the purpose of indicating to them that although DP could not take the oath, in the form required, it would nevertheless be a most satisfactory member. As we have seen, the letter stated, " * * * we are unable to make any *direct* commitments. However, * * * we think the result will be eminently satisfactory to your foreign associates" (RE. 1483). [Italics supplied.] The clear implica-

producers were consummated shortly *after* the approval and execution of Exhibit E as contemplated in the March 1931 Conference. These agreements were executed as follows:

Ex. G (RE. 178), Nov. 23, 1933.

G-1 (RE. 197), June 17, 1935, Effective as of May 1, 1934.

G-2 (RE. 221), June 17, 1935, Effective as of May 1, 1934.

G-3 (RE. 233), June 17, 1935, Effective as of May 1, 1934.

F-8 (RE. 178), Sept. 1941.

The District Court found that these agreements had the intended effect of preventing any exports of titanium pigments to the United States (F. 68, R. 277). The Japanese and Canadian markets were also organized by the combine *after* Exhibit E was approved and executed. (Japan—RE. 292-341; January 1936; Canada—RE. 342-394, January 1937).

tion was that an indirect commitment was being undertaken, and this was confirmed by the DP-approved NL letter to IG. That was the only way it could have been done, as DP had no contract relations with IG, and to have placed a provision satisfactory to IG in Exhibit E would have made the contract illegal on its face and would have rendered the whole pooling arrangement between DP and NL in the United States clearly illegal. The record does not disclose what was said by Rupperecht at the time he delivered the letter to NL."

Rupperecht knew that his letter was to be used to secure IG's consent to Exhibit E and indicated to

" Rupperecht died September 1944. The NL representative Beechorman was incapable of testifying at the trial. Hanley, who has been the head of the Foreign Relations Department of DP since 1940, was not called as a witness by DP to throw any light on the letter or any conversation he had with Rupperecht of DP at the time of its preparation. E. G. Thompson, director of Krebs, and since April 1942 general manager of the Grasselli Chemical Department of DP (RE. 585) and with whom Rupperecht had also discussed the IG request for expressions "by Krebs in some form that they will respect Titangesellschaft's territory" (RE. 1485) was also not called by DP as a witness to offer such explanation of the contents or the purpose of the letter as he might offer. Wm. Richter, another director of Krebs, to whom Rupperecht also sent a blind copy of the letter of June 28 (RE. 1485, RE. 584) was also not called as a witness by DP. The failure of DP to call such officers or employees as witnesses to aid the court in construing Rupperecht's ambiguous conduct and letter, justifies the conclusion that their testimony, if given, would have placed a construction on such ambiguous conduct or actions of the defendant unfavorable to the defendant's claim. *Interstate Circuit v. United States*, 306 U. S. 208.

NL that it could also assure IG that its interests "would be well taken care of" by NL (RE. 1485). DP therefore placed in the possession of NL an instrument of assurance which it knew was necessarily ambiguous in content and in addition thereto and in order to make doubly certain that the proper reply would be conveyed to IG, had authorized NL to assure IG that NL would look after IG's interests.

Armed with this authority which was apparently given in the several conversations which Rupperecht had with NL which are referred to in the Rupperecht letter to Thompson (RE. 1485), NL proceeded to amplify the Rupperecht letter of June 28 by its letter to IG dated July 12, set forth *supra*, pp. 24-27. This NL letter was obviously intended to clear up any ambiguities in the Rupperecht letter and fully to satisfy the IG request that DP "indicate in some form" that it would fully respect TG's territory. A copy of this letter was read by Rupperecht in NL's office and mailed to DP for its records (RE. 1490). DP therefore clearly knew about the NL letter of July 12, although a copy of it was never found in the DP files or records. Such knowledge is significant, and the inference to be drawn therefrom is an inescapable admission of guilt as to the intent and purpose of DP to commit itself to respect the territories of the foreign producers of NL.

NL was thus authorized by DP to vouch for its future conduct as being eminently satisfactory to

IG. The manner of taking the "obligation" was different from the written form required by the provisions of the 1920 agreement. There was, however, no doubt in the minds of the other members of the combination or in the mind of NL, the DP sponsor, that DP would respect the fundamental obligation of the members of the combine to each other and would not transgress their exclusive territorial rights. That DP was in fact a most satisfactory member appears from the statement of Jebson of NL in 1940 that

-The cooperation with du Pont, as far as the European associates are concerned, has, however, been satisfactory in the years passed * * * (RE. 1956).

The record shows that whatever the DP policy may have been with reference to selling in foreign markets "it never did sell or export into the territories of other members of the combine. It did open up its know-how to them." It did make

"Rupprecht indicated in February 1933 that DP had always been doing some export business and had shipped titanated lithopone to England and that DP had an office in Buenos Aires and one or more offices in Japan and China (RE. 1428). The Government contends that this indicates that DP's argument that it was not its policy to export is a specious one.

"There was no provision in Exhibit E for the granting or exchange of know-how for the foreign associates of NL. DP thus went outside the contract in this respect and did so immediately after the approval of Exhibit E by the foreign associates of NL. The Government contends this was a recognition by DP of a commitment by DP to "cooperate" with the combine, and evidences the existence of an "understand-

its patents and patent applications available to them on a royalty-free basis. In return it received the benefits of membership in the combine—an U. S. market free from any foreign competition, the know-how of the foreign associates of NL and access to their patents and patent applications on a royalty-free basis. What more could a full-fledged member give or receive?"

ing" outside the provisions of Exhibit E between DP and the other members of the combine.

"DP suggests in its brief that Exhibit E was approved by the foreign associates of NL, including BTP, before its actual execution, and urges this as evidence that its action did not beget the approval of Exhibit E. The record shows the contrary to be true, as BTP approved Exhibit E on July 29 on the basis of the DP letter of June 28 and the NL letter of July 12 to IG (RE. 1984).

DP also argues at length in its brief that the court misconstrued its letter of June 28 to NL and that it merely put over a "clever business deal" with NL, its foreign associates and the Blumenfeld companies. The record belies this construction.

DP argues at length in its brief that Jebson's oral testimony indicates that he was never able to get an agreement from Rupprecht in compliance with the requirements of the 1920 contract. It is, of course, not in dispute that DP did not express itself in writing to that effect for obvious reasons. Jebson, a devotee of the written word, would have much preferred to have Rupprecht express himself in the clear and unequivocal language of the 1920 agreement, and would have been fully satisfied with no less (R. 1043). That Dr. Jebson, a Norwegian, did not understand "a gentlemen's agreement" is shown by Dr. Thompson's statement as follows: "It appears to me that Dr. Jebson cannot appreciate that a friendly and cordial relation with Krebs would take the place of specific legal obligations." (RE. 1443.) His testi-

5. The cooperation between DP and the members of the combine after the 1933 DP-NL contract clearly shows membership in and cooperation with the combine

The attitude of DP after the approval and execution of Exhibit E in 1933 toward the members of the combine and new risk capital entering the industry reflect DP's status with the combine. It cooperated with the foreign members of the combine in making its patents and know how available to them on a reciprocal basis and did not compete with them in their respective exclusive territories. Such conduct is more consistent with membership than nonmembership. Such conduct is particularly persuasive as indicating membership since DP did discriminate against new risk capital attempting to enter the industry.

It has already been shown that the European cartel agreements were made possible and were entered into after the 1933 agreement, between DP and NL, as approved by the foreign associates of NL, had been executed. It has also been shown that the Japanese and Canadian markets were money on the trial—13 years after the approval of Exhibit E by IG, is in some respects in apposition to his written expressions as to the arrangement between DP and the foreign associates of NL previously referred to on page 31. To the extent that his oral testimony may be at variance with his written expression, it is submitted that the contemporaneous written expression of his understanding of the arrangement between DP and the other producers of titanium pigments is clearly the best evidence of that understanding.

completely organized by the combine *after* the '33 agreement. The complete elimination of all competitors in the Canadian market in 1937 and the joint control of that market by the Canadian vehicle of DP (CIL) and its American contract party NL amply protected the U. S. market and of course DP from any possible threat of competition from its closest potential competitor.

6. *DP cooperated with foreign producers and members of the combine by exchanging "know how" with them*

The record shows that the relations between DP and the foreign members of the combination after 1933 were those of cooperative members of the combine. DP permitted representatives of the foreign producers to visit their plants and secure the DP know-how. Raspe of TG visited the DP plant immediately after IG and TG had given their approval to the 1933 agreement.¹⁸ In November 1933 Dr. Raspe was "spending all of his time in the Krebs plant learning all that they

¹⁸ The Government contends that this is significant evidence that DP was giving the combine and its members its full cooperation, for if DP had no understanding with the foreign producers and had not joined the combination and was in fact a competitor, either actual or potential, of the combine, as argued by DP, it would not have permitted TG to have access to its plant know-how in the absence of an understanding "*in some form*" that it was not going to compete.

have therein" (RE. 1540). Dr. Kuhne of TG was likewise permitted to visit the DP titanium plants (RE. 1853). DP enjoyed similar privileges from the foreign producers. Dr. Booge of DP visited the plants of both the German and British companies in 1937 (RE. 1849). The know-how of DP was, therefore, directly available to the foreign associates of NL until the exchange of all technical information and experience between DP and NL was terminated in May 1940 (RE. 1841-1855, 1990, 3009). NL and DP also extensively exchanged know-how during this period (RE. 1841-1942, R. 903-4), thus aiding each other to establish their domestic market positions against any potential or actual domestic competition. This DP aid to the foreign producers was, of course, of comparable benefit to them in their respective exclusive territories.

Plant visits were denied members of the Blumenfeld companies by DP in 1938 (RE. 1861). This definitely disproves the DP contention that the "know-how" exchanged between DP and the other producers was available to anyone in the industry. The record fails to show that DP ever made its "know-how" available to anyone except NL and its foreign associates who had approved the 1933 agreement on the basis of the DP letter of June 28, 1933, and the NL letter accompanying it.

7. *DP exchanged patents and patent applications with foreign producers on a royalty-free basis pursuant to an oral understanding*

7 The patents and patent applications of the foreign associates of NL were likewise available to DP on a royalty-free basis after it had joined the combination in 1933, a fact which further shows DP's cooperation with the combine. Article V of the 1933 agreement gave NL's foreign associates the first rights to secure licenses on any foreign patents relating to the manufacture or use of titanium pigments which DP might secure in the territory of such foreign associates. DP, on the other hand, through NL, was entitled to similar rights on the foreign associates' patents in the United States. The basis under which these rights could be reduced to license form was left to negotiation under the 1933 contract.

The foreign associates of NL desired a general arrangement covering the exchange of patents between DP and themselves in order to eliminate the details of negotiating licenses under specific patents as required by Article V of Exhibit E (RE. 2989-3059). The District Court found that DP refused to make a *written*¹⁰ general agreement for the

¹⁰ DP also carefully refrained from keeping any written memoranda regarding the conferences in which the oral understanding was worked out. Rupprecht suggested to the Tinc representative, Kaegbehn, that he should not keep any written records of the conferences. Kaegbehn testified, "I recall Mr. Rupprecht cautioning me not to keep any

exchange of licenses on present and future patents with NL's foreign associates. As in the 1933 negotiations, they gave as their reason for refusing that such an agreement would be in violation of the antitrust laws (F. 89, R. 300). The District Court found, however, that DP did enter into an oral understanding with the foreign associates of NL whereby each of the parties agreed to exchange such of its patents and applications within the licensed field, as defined in the 1933 agreement, as might be desired by each from the other (F. 89, R. 301). Under the oral understanding such patents and applications as were desired by each were to be licensed to the other on a *royalty free basis* in separate annual license agreements. These licenses were to be exclusive except as to DP and in England as to ICI, but DP expressed the view that the reservation was without practical importance (F. 89, R. 300). The reservations were never utilized, so the licenses granted by DP were exclusive in fact as Rupprecht indicated they would be in his letter of June 28, 1933. He stated (RE. 1484):

The whole agreement, you will recall, for definite reasons, was placed on a non exclusive basis * * * we believe there will be no difficulty in working out a solution that will be acceptable to all parties. It may well be that such negotiations will

notes on my conferences during 1937 and 1938" (R. 778). Although DP was subpoenaed to produce any memorandum concerning these negotiations, DP produced none (R. 781).

result in exclusive licenses to your foreign associates.²⁰

The district court found that acting in accordance with the oral understanding, royalty-free licenses were exchanged between DP and NL's foreign associates in 1939, 1940, and 1941 and no licenses under the applications of NL's foreign associates were granted to any other producers in the United States except NL and DP (F. 90, R. 302).²¹

²⁰ That the DP patents which it made available to the foreign associates of NL were exclusive in practice cannot be lightly dismissed by DP. The DP argument that the oral understanding of 1938 was of no consequence is not sustained by the record when viewed in the light of the relationship between DP and other members of the combination after the 1933 agreement. The exchange of patents and patent applications between DP and the foreign members of the combination was obviously of definite value in furthering the objects and purposes of the combination throughout the rest of the world. On the other hand, the availability of the "know how" and patents of NL's foreign associates to DP was of inestimable value to it in enabling DP together with NL to secure, maintain, and guarantee their market position in the United States against all actual or potential competition.

²¹ The existence of an oral understanding in which DP participated is another example of the cooperation between DP and the members of the combination *and of the form in which it was arranged for*. The cooperation necessarily could stem only from membership in the combination as cooperation does not generally exist between *bona fide* competitors in the absence of some kind of general understanding between them.

The licenses granted under the oral understanding were of great value to DP as 35% of its TiO_2 sales in 1941 were covered by licenses granted to DP by Tinc in 1941 (RE. 486, 3201, 3206). Since NL had to approve these licenses (F. 89, R. 301), it is hardly likely NL would have been thus aiding a competitor by giving its approval, if any competition likely to result therefrom might affect the price structure.

Under this oral arrangement DP deferred the inclusion of certain applications and patents in specific license agreements until it desired such application or patents to be included in certain cross licenses (RE. 3112, 3118, 3126, 3131). The patents and applications so deferred were, however, available to DP at all times for use even though not licensed. Among the patents and applications so deferred, but available to DP, were the Rutile pigment applications available to DP from June 1938, but not licensed to it until May 10, 1940 (RE. 3118, 3089).²² The Government submits that such action of DP in thus selecting certain applications and patents for specific license agreements, although available to it at any time,

²² The Rutile patents were Nos. 2,303,305, 2,303,306, and 2,303,307. In connection with these patents DP assured NL and its foreign associates in November 1938 that before it filed its patent application relating to the manufacture of Rutile it would consult with the representatives of NL's foreign associates in order to avoid interference proceedings with the Rutile pigment applications of NL's foreign associates (RE. 3089, 3096, 3097).

could only have been intended to make the licenses appear legal and to have been individually negotiated as distinct and separate transactions apart from the oral understanding pursuant to which they were actually made.

8. The DP foreign patents were used to prevent imports into the United States

It is also significant that the DP foreign patents were only sublicensed by NL's foreign associates if the sublicensee agreed not to export from the territory of the foreign associate (RE. 3148). Such action clearly shows that the DP foreign patents, which were made available to the foreign producers under the oral understanding of 1938, were used not only to protect the territories allocated to the producers under the various agreements but also to protect the United States market; and of course DP, from foreign competition. DP imposed a comparable restriction on the exportation by domestic purchasers of titanium pigments manufactured under patents licensed in the 1940 and 1941 DP-Tinc cross-licensing agreements (Exs. R and S, RE. 470-486). These cross licensing agreements provided for and were intended to restrict, the use and export by purchasers of titanium pigments manufactured under any of these patents (RE. 3132-

3139).²² DP thus extended reciprocal protection to the foreign producers in these agreements.

It is accordingly submitted that commercial and technical relations between DP and NL as well as between DP and NL's foreign associates were on a most friendly and cooperative basis after Exhibit E was approved and executed. DP did exchange "know-how" with members of the combine. DP exchanged its patents and patent applications with NL pursuant to the 1933 agreement, and with its foreign associates pursuant to an oral understanding. Previous to the oral understanding of 1938 it had expressed its good will in a one-way royalty free license agreement of certain DP foreign patents (Ex. M, RE, 406). Such cooperation can hardly be said to be consistent with arm's length relations between actual or potential competitors. It could only result from membership in the combine.

9. The relations between DP and Zirconium and V. C.

It has been previously pointed out (*supra*, p. 19) that there was extreme doubt concerning the validity of many of the patents involved in this industry. The validity of none of these patents has ever been questioned in any court any-

²² Mr. Hancock of the DP patent staff did not endeavor otherwise to explain or repudiate these restrictions nor did he testify concerning the 1938 understanding between DP and NL and NL foreign associates in which he participated (RE. 3077).

where in the world. That patents of doubtful validity may be a very effective weapon to suppress or deter potential competition, particularly in the hands of a corporation with vast financial resources, is obvious.

DP was not averse to using patents as a weapon. In December 1932, Rupprecht recognized that, of the four Auer patents owned by DP, "there was only one that we consider to be of any real value and even that is doubtful" (RE. 1585).²⁴ In 1933, he referred to the possibility that another Auer patent "might be a very valuable weapon in our hands" (RE. 1587).

In the license negotiations between DP and Zirconium in 1934 the record shows that Zirconium relied on the early Barton and Weintraub expired patents as prior art in opposing DP's claims of alleged infringement (RE. 4258). In these negotiations DP asserted Blumenfeld # 1504669 against Zirconium. This is one of the patents DP felt could be avoided or proved invalid before it acquired the patent with the assets of CP in 1931 and when it was in the same position as Zirconium was in 1934 (RE. 1029). DP also cited 1795467 (reissue 18854) against Zirconium (RE. 4263). This is one of the patents NL had stated might be valid "in respect to the operation of all others than ourselves and the du Pont Company" (RE. 1364, 1366). DP also cited 1633621

²⁴ The district court found the Auer patents were not of much consequence (F. 38, R. 249).

against Zirconium who argued that prior art anticipated this patent (RE. 4259). NL was of the same opinion in 1932 when it was asserted against it by DP, for it stated then that "It is well known that such solutions have been used since the manufacture of titanium pigments were placed on a commercial basis" (RE. 1356, 1365).

In view of the foregoing it is no wonder that Zirconium felt the industry was substantially patent free in 1934 (as Barton suggested it would be in 1932 (RE. 1249)), and advised NL in its negotiations with it that (RE. 1659):

Many of these patents are very questionable where there is any invention involved due to the prior art and knowledge already existing. Of course, questions pertaining to the validity of these patents could only be settled by court action. Unfortunately there has been no litigation involving titanium oxide processes, and the validity of these patents has never been tested out in court.

DP admitted that it had no proof of patent infringement at the time Zirconium decided to accept a restricted license from DP on a royalty basis without "know how" and access to its future patents and applications on an exchange basis. The Executive Committee of DP advised the finance committee on July 18, 1935, that although it believed Zirconium has infringed some of the DP patents " * * * no proof is available, and it would be necessary to institute court inter-

rogatory proceedings against American Zirconium Corporation to develop definite proof" (RE. 1690).

DP restricted the production of its licensees, Zirconium and V. C., and to that extent restricted their capacity to compete not only with itself but also with N. L. The district court found that the DP licensees to Zirconium and V. C. had the necessary effect of restricting competition (Fs. 95-96, R. 304; F. 84, R. 296-7).

The restrictions which DP imposed on the productive capacity of Zirconium and V. C. effectively restrained and prevented them from increasing their productive capacity to a point where they could give DP any competition in either production or price. The DP restrictions not only prevented the development of the licensees as competition in the pure titanium dioxide field but also operated to prevent them from entering the composite pigment field. The restrictions imposed by DP were, therefore, of direct benefit to NL also. The licensees required Zirconium and V. C. to pay a royalty on all titanium dioxide irrespective of whether produced under the DP patents (F. 84, R. 295), and thus further restricted the ability of the licensees to compete by increasing their production costs through royalty payments.²⁵

²⁵ The Government, in answer to DP's contention that the restrictions in the license agreements with Zirconium and FC are legal, contends that, as a matter of law, the quantity restrictions on production were illegal *per se* under the Sher-

DP refused to exchange future patents with Zirconium in its license with that company, although Zirconium had requested such a provision in the license. DP replied to the Zirconium request, "relative to your suggestion that provision be made to have our license include rights under any of our future patents in the titanium dioxide pigment field, and that we would also be granted rights under any of your patents, now issued or which may be issued, we regret that this is not of interest or acceptable to us * * *, we are sorry that any blanket allowance rights under future patents cannot be considered by us * * *"

(RE. 1674). It is submitted that the DP conduct in refusing the Zirconium request for a cross licensing agreement of future patents *comparable to that between DP and NL* shows discrimination by DP and its conduct is in sharp contrast and in direct opposition to its conduct and patent policy toward the other members of the combination. This refusal of DP answers their repeated contention that their license agreements promoted

man Act. Restrictions in excess of the monopoly covered by a patent grant imposed on a license are illegal *per se* as a patent affords no immunity for a monopoly not within the grant. *Ethyl Gasoline Corporation v. United States*, 309 U. S. 436. The use of a patent grant to suppress competition in the sale of an unpatented article is unlawful. *Morton Salt Co. v. Suppiger Co.*, 314 U. S. 489.

The attempt of Du Pont to restrict the quantity of the unpatented products which the licensees could produce under the licensed process patents is beyond the limits of the patent grant and as such *per se* illegal. *American Equip. Co. v. Tuthill Building Material Corp.*, 69 F. 2d 406 (C. C. A. 7).

rather than restrained competition in this industry and shows that, although Zirconium took a license from DP, it did not get and could not get the kind of license it wanted.

The distinction between the Zirconium license and its license with NL is that the Zirconium license " * * * does not call for any exchange of information, know-how or *future developments* and is confined entirely to Krebs present issued patents in the pure titanium dioxide field" (Re. 1690).

It should be observed that DP admitted in 1940 that the frequent visits of NL to the DP plants resulted in bringing down NL's manufacturing cost to somewhere near the DP level (RE. 4317). No such privileges were, of course, accorded Zirconium and VC. They were thus deprived of the same ability to compete with DP as DP indicates was available to NL. This evidence further shows the value of "know-how" in this industry.

The record, therefore, clearly answers the DP contention that its treatment of the licensees, Zirconium and V. C., promoted rather than restrained competition, since DP refused to give them the same consideration that was given the members of the combination with whom DP says it had no arrangement,* and of which it contends

* DP even gave the foreign producers a royalty-free license on one of its foreign patents in 1937 for merely paying the upkeep costs on the patent (RE. 406).

it was not a member. If DP was not a member of the combination, as it contends, what reasonable and plausible explanation can it give for its sharply different and contrasting treatment between NL and the non-conspirator American producers? The fact that DP restricted the capacity of Zirconium and V. C. to compete in the pure TiO_2 field and excluded them from the composite field by limiting their productive capacity at a time when DP and NL were strengthening and establishing their market positions in both fields by increasing their plant capacities by additional construction as fast as possible, is reconcilable and consistent only with a finding of membership in the combination. Further the record is replete with evidence to the effect that DP's principal problem at the time the licenses were granted and while the restrictions were effective" was to find ways and means to construct and increase its plant capacity to a point where it could meet the increasing market demand for titanium pigment products. (R. 4396 and exhibits attached, R. 1162-1165).

DP admitted that as production increases the cost of production will ordinarily be reduced proportionately (R. 1171). It is submitted that the restrictions imposed by DP and its licensees were a most effective way of preventing them from

" DP cancelled all restrictions on the productive capacity of its restricted licensees in November 1944 after the instant case was filed and before trial (F. 85, R. 297).

ever reaching a position in this industry where they might be regarded as even potential competition to either DP or NL. It should not be overlooked that the industry was maturing while these restrictions were in effect and that DP as well as NL were establishing their market positions with the users of titanium pigments during this period. The fact that DP had over 80 research chemists working in this field alone (R. 1160) shows the importance which DP attached to this industry. It should require no extended argument to support the contention that the restricted licensees necessarily had no incentive to develop products through research in this industry when their production was so restricted that any developments would be of little import to them from a practical point of view.²⁸

²⁸ DP argues that its restrictions were of no effect in restraining competition and contends that it frequently waived the production restrictions. The record shows that this magnanimity on the part of DP, amounted merely to the granting of permission to the licensees to lump their carry-over production in cases where they had not realized the maximum production allowed in any one year. Even then the DP permission was reluctantly given to Zirconium and Rupperecht wrote its licensee " * * * we must ask that in the future you strictly adhere to the maximum quantities specified in the contract" (RE. 1707). Management is obviously restricted in planning an efficient production and marketing program when it knows it cannot produce in excess of a stipulated quantity of the product it manufactures. The DP vice was in restricting the production of its licensees while it and NL were securely establishing their own manufacturing and marketing position in the industry, so they

It is accordingly submitted that the action of DP in imposing the restrictive provisions upon its two licensees, V. C. and Zirconium, definitely prevented the development of even any potential competition from these companies and prevented and still prevents them from effectively attacking the position of dominance enjoyed in the titanium pigment market today by both DP and NL. That DP and NL do enjoy a dominant position in the market cannot be denied. Together they produce 100% of the composite pigment and approximately 90% of the pure pigment sold in the American market. The position of dominance in the American market which DP and NL now enjoy is the result of their illegal action in combining together as well as cooperating with the other producers of titanium pigments throughout the world for the purpose and with the necessary effect of restraining foreign as well as domestic trade and commerce in this industry.

10. DP respected the territories of the foreign producers

DP admits that it did not export into the territories of the foreign members of the combine. It argues, however, that this is not to be con- could effectively dominate and control the price structure. Zirconium allowed 36,000 1935 through 1941, producing 29,676; VC allowed 23,500 Oct. 1937 to Dec. 31, 1941, producing 17,733. NL expressed the view in 1940 that a production of 10,000 tons a year was necessary for anyone to operate a new plant in this industry on a profitable basis. (RE. 3642).

strued as evidence that it made a commitment with the members of the combine to respect those territories.

It first contends that for business reasons it was not the policy of DP to export. This contention was lightly regarded by the district court for the reasons stated in its opinion (R. 217). In February, 1933, DP had no policy against exporting²⁰ (RE. 1428). DP then contends that it never had any products to export and that its productive capacity was always behind the market in the United States. This argument is specious. The undisputed facts show that DP did in fact export titanium pigments to every country in the Western Hemisphere (RE. 537-551). In addition, we

²⁰ NL wrote Jebesen, its foreign representative, in February 1933, that, "We have practically made up our minds that unless the Krebs Corporation in back of DP will agree not to sell for export out of the United States our cross license system cannot go into effect" (RE. 1422). DP objected to this because Rupprecht "said *they have always been doing some export business*. They have shipped titanite lithopone to England, have an office in Buenos Aires and one or more offices in Japan and China. He did not think they would want to accept the restriction proposed. He said that the legal department advised him that as long as this was a cross licensing agreement between two United States companies any restriction of territory might be considered in violation of law" (RE. 1428).

The record contains evidence of exports of American purchases of titanium pigments to markets in Asia and the policing of such exports by NL (RE. 3319-3329). The fact that such exports could be profitably made by purchasers of titanium pigments in the United States shows a manufacturer of the product such as DP could have sold in Asiatic and other markets at a profit.

submit that it cannot be argued, in view of the background and other evidence in this case, that it is a mere coincidence that DP's export market was in fact the same as that allocated to its contract partner and co-defendant NL under the 1920 agreement.

DP then contends that its failure to export is explained on the ground that the foreign patent situation prevented such exports. There are three answers to this attempted explanation: (1) The basic titanium patents expired in England in 1933 (RE. 791); (2) there are many countries in the territory of the foreign members of the combine in which there were no patents;³⁰ and (3) it is obvious that this argument did not prevent DP from exporting into the Canadian market even though it had no patents in that country (RE. 437).

The fact that it did not export to the exclusive territories of the foreign members of the combine cannot be lightly disregarded or explained on the grounds of DP business policy or foreign patent protection. We again submit that the record clearly supports a finding that DP joined the combination and made a commitment to respect the exclusive territories of the foreign producers whether it was in the form of assurances as found by the district court or by a tacit or oral understanding to that effect.

³⁰GTG's territory, for example, included most of Europe and Asia (Ex. C-Cp, incl., RE. 46-87).

The DP attempt to explain their failure to compete in the territories of the foreign producers also falls in view of the recognition of such an understanding on the part of Rupprecht in 1936. He advised the president of NL in March 1936, by telephone that DP was filling a small order for export to England but "was inclined to send it as a sample, no charge; not wanting to have any question raised about their selling outside of the United States." This statement would have been unnecessary if there had been no understanding that DP was not to export (RE. 3300, F. 73, R. 289). The documentary evidence as to this in NL's files also shows what the 1933 negotiations made obvious, namely, that Rupprecht preferred oral understandings and conversations rather than written ones if the arrangement or conversation was likely to reflect a violation of the antitrust laws.

It is accordingly submitted that such evidence, together with the written summary of the titanium industry, as made by Jebesen in October, 1933,²¹ and the oral understanding of 1938 cannot be likely dismissed by DP on the grounds urged in their brief. The evidence amply supports the district court's finding that a necessary effect

²¹ In this summary Jebesen wrote, "It is understood that the Krebs Corps will not manufacture or sell outside the American Continent" (RE. 1533).

of the agreements and understandings it found to exist between DP and the other defendants and co-conspirators, was that DP refrained from exporting titanium pigments outside the Western Hemisphere and has refrained from competing outside the Western Hemisphere with any of its co-conspirators in their respective exclusive territories (F. 95-2, R. 304). The relations between DP and the other members of the combination after the 1933 contract, together with the specific evidence before discussed, adequately and substantially sustained the ultimate finding of fact that DP joined the combination.

11. *Any competition existing in the titanium pigment industry in the United States is a co-operative competition between DP and NL and does not affect price*

DP suggests that the 1933 contract promoted competition in the industry and relies on F. 78, R. 290, to support its contention. This finding cannot of course be isolated and read apart from the other findings and opinion of the court which are definitely adverse to DP.

It should be noted at the outset that DP produces many types of titanium pigments which are not produced by NL and which are therefore not in competition with NL products.²

² DP sells about 40 different kinds of titanium pigments (R. 1153). NL does not sell any titanium pigment which is

Further, price stability has existed and has been maintained in the American market since the 1933 agreement (F. 95, R. 304). Neither DP nor NL have any records showing the manner or method of arriving at its price lists (R. 1148), and DP purports not to know its exact costs (RE. 4317). Although the NL and DP productive capacity and the production in this industry have increased tenfold since the 1933 agreement, prices have only decreased from 17¢ a pound in 1933 to a low of 13¢ a pound in 1940 to 14½¢ per pound in 1941. The interest of DP in maintaining a high price for titanium pigments in order to protect its lithopone business was the principal reason for DP entering the titanium pigment business. The interest of DP in operating its lithopone plants on a profitable basis plus NL's natural desire to avoid price competition and the total lack of any actual or threatened competition from foreign or domestic producers necessarily operated to stabilize the price at which titanium pigments were sold in the United States.³³ The competition of VC and Zirconium, which DP's sales director of six weeks the commercial equivalent of 22 of these 40, and DP does not sell the commercial equivalent of three of NL's products (R. 1149).

³³ In 1931 representatives of DP stated to NL that "they had to keep at least a 2¢ a pound margin between the price of titanox and lithopone and, therefore, if we (NL) reduced the price of our titanium they would have to reduce the price of lithopone" (RE. 1067).

(R. 1152) called "tough", plainly was not sufficient to undermine the price structure. Both of these companies were themselves purchasers of titanium pigments from NL and DP, and together, undoubtedly as a result of restrictions imposed by the defendants upon their output, could only produce less than 10% of the total United States production of pure titanium pigments and no composite pigments whatever. While it is true, therefore, as claimed by DP, that the complaint in the instant case does not charge price fixing, one of the necessary effects of the 1933 and other agreements has been, as found by the court, to maintain and stabilize prices in this industry. Both DP and NL had obvious reasons, supported by the record, to maintain price stability and avoid price competition.

12. The district court properly held that du Pont had joined the conspiracy

Substantially all of DP's assignments of error are based on the contention that it was not a member of the conspiracy found by the lower court. The district court stated succinctly in its opinion the problem of DuPont's participation in the cartel as follows (RE. 213):

The question is whether it [DP] succeeded in avoiding not only the form but also the substance of transgression.

The lower court, after painstaking review of the evidence, concluded that du Pont had not

avoided the substance of a violation of the anti-trust laws.

Defendant du Pont in its brief (pp. 53-63) has argued, somewhat ingeniously, that the form of transgression is lacking since no agreement to join the cartel was found by the lower court, but carefully avoids the lower court's findings relating to the substance of the violation. By careful excision of the district court's findings, defendant du Pont attempts to present a picture of unilateral action by du Pont which has been construed by the district court as the product of conspiracy (see pp. 54-55 of defendant du Pont's brief). A fuller quotation from the findings gives a more complete picture (R. 292-293):

There is no evidence that Rupprecht remonstrated against the sending of Beschorman's letter to I. G. Krebs, and DP through Rupprecht acquiesced in and ratified the assurance made by Beschorman to IG as to territorial delimitations of the titanium pigment business. In acquiescing in such assurance that DP would not manufacture in or sell in TG's territory, DP was not making a promise; it was doing no more than giving expression to its then existing policy not to manufacture or sell in Germany and other TG territory. DP's aforesaid assurance in part formed the consideration for continued abstinence of the European producers from exporting to the United States.

IG construed the communications to mean that Krebs will loyally respect the territorial delimitations as regards manufacture, granting of licenses and sale, which are fixed in the agreement between Tinc and TG; and in reliance thereon, withdrew its objections to the agreement Exhibit E. There is no evidence that the aforesaid construction was communicated to DP.

DP did not agree with TP or NL that it would refrain from exporting titanium pigments into TG's territory; but it assured TP and NL that, as a practical matter, such exports would not take place.

DP did not agree with TP or NL that it would grant NL's foreign associates exclusive licenses under DP's foreign patents; but it gave assurances that the practical effect of its conduct would produce substantially identical results as if it did so agree.

Tinc and NL's other foreign associates approved the agreement between TP and Krebs on the basis of the DP assurances.

NL agreed with DP that all of NL's titanium pigment business would be done exclusively through TP, and DP agreed with NL that it would only engage in the titanium pigment business through Krebs. The conduct of DP of its titanium business after January 1, 1936 through the Krebs Division of DP did not breach or violate this agreement or any assurances previously given by DP through Krebs.

DP, through Rupperecht and Krebs, by these assurances *and Exhibit E*, joined the conspiracy found herein to exist between NL and its associates. DP's status, rights and obligations were different from those of the other members of the combination. DP did not thereafter withdraw. [RE. 287-289.] [*Italics supplied.*]

The necessary effects of the agreement Exhibit E and of DP assurances have been—

(3) To give NL and DP together domination and control over the titanium pigment business in the United States.


(4) To remove obstacles from the execution of the TG-Aussig agreement—Ex. G, the Blumenfeld agreements G-1, G-2, G-3, the Japanese agreement Ex. J, the Canadian agreement Ex. K and the price agreement between BTP and Laporte for the British Empire.

(6) To restrict and obstruct exports from the United States outside of the Western Hemisphere.

(7) To restrict and obstruct imports into the United States. [R. 292-3.]

A reading of Finding 73 (R. 280-289) demonstrates that the lower court used the word "assurances"²⁴ not to denote that there was no under-

²⁴ Webster's New International Dictionary, Second Edition, "Assurance—Act of assuring, as by personal engagement; a pledge or guarantee; also, a declaration tending to inspire full confidence."



standing or meeting of the minds between du Pont and the other conspirators, but merely that du Pont had not made binding commitments or contracts which the other conspirators could enforce against it. du Pont's argument that the court erred in finding that it joined the conspirators resolves itself into the contention that because the lower court did not find agreement by du Pont to refrain from exporting and to grant exclusive licenses to NL's foreign associates, a finding by the court that du Pont in fact joined the conspiracy must be error. This hypothetical argument ignores the concrete results of the agreement embodied in Exhibit E that in fact du Pont gave assurance³⁵ that it would not export to or manufacture in various foreign countries, knowing that the foreign conspirators would not import into or manufacture in the United States; that in fact DP thereafter did not export to the exclusive territories of the foreign producers and gave licenses exclusive in effect to NL's foreign associates. This unrefuted evidence demonstrates conclusively that it was no offhand expression of a unilateral policy that DP made to NL and its foreign associates. Nor should it be overlooked that IG, the powerful chemical trust of Germany,

³⁵ An important fact is that the letter from National Lead to IG which on its face indicates that du Pont was cooperating with the cartel not only was shown to Rupprecht by National Lead but a copy sent to du Pont. du Pont here argues that since neither Rupprecht nor Beschorman were able to testify, there is no proof that Rupprecht acquiesced in the

had vigorously disapproved the proposed cross-licensing agreement between NL and du Pont, since it departed from the restrictions imposed upon other cartel members. Yet, after the assurances made by du Pont were transmitted to IG, it withdrew its opposition and thereafter both du Pont and IG conducted themselves in accordance with the understanding. (RE. 282-288.)

Although the lower court did not go so far, it is clear that there was abundant and sufficient evidence for a finding that du Pont by agreement, partially written and partially oral, joined the existing conspiracy in 1933 (*Interstate Circuit v. United States*, 306 U. S. 208; *American Tobacco Co. v. United States*, decided June 10, 1946, Nos. 18-20, last Term); and that du Pont's subsequent conduct resolves any conceivable doubt as to its participation in the cartel. Indeed, it seems clear that the lower court leaned over backwards in resolving any inferences to be drawn from the evidence in favor of defendant du Pont. The fact that du Pont had full knowledge that an illegal conspiracy was in existence, that it was invited

letter rather than objecting to it. But clearly du Pont did not object in writing to the letter even after a copy was sent to it, and justifies an inference that du Pont did not regard the letter as inaccurately stating its true position. That this inference is a proper one is corroborated by the fact that National Lead and IG interpreted the correspondence as indicating that du Pont intended to cooperate, and that in fact du Pont's subsequent conduct was entirely consistent with this interpretation.

to participate in the illegal activities of the cartel, that it entered into a licensing agreement with the cartel (assuming *arguendo* that Exhibit E is legal on its face), knowing that it would further the purposes and objectives of the conspiracy, that du Pont received all the benefits of the conspiracy, would ordinarily be sufficient to justify a finding that du Pont became a member of the conspiracy. *United States v. Masonite Corp.*, 316 U. S. 265, 275; *Interstate Circuit v. United States*, 306 U. S. 208. This conclusion can be reached quite apart from any consideration of the assurances given by du Pont at the time of the execution of Exhibit E.

The simple answer to du Pont's contention that the "assurances" were made to mislead the cartel members and were never commitments on du Pont's part is found in the fact that du Pont carried out the assurances and enjoyed the fruits of the conspiracy. Later-day declarations by du Pont to the contrary are sufficiently answered by the fact that they "must be held to have intended the necessary and direct consequences of their acts and cannot be heard to say the contrary." *United States v. Patten*, 226 U. S. 525, 543.

Defendant du Pont seizes upon the failure of the lower court to use the word "agreement" in its findings, and argues from this that the use of the word "assurances" is not sufficient to justify a finding of participation by du Pont in the conspiracy. Quite apart from the fact that the evidence demonstrates that du Pont gave its "in-

formed and interested cooperation," *Direct Sales Co. v. United States*, 319 U. S. 703, 713, and that by its assurances a meeting of the minds in fact resulted, defendant DuPont errs in its interpretation of conspiracy law. In the *Interstate Circuit* case, *supra*, the late Chief Justice carefully disposed of a similar contention, stating (pp. 226-227):

While the District Court's finding of an agreement of the distributors among themselves is supported by the evidence, we think that in the circumstances of this case such agreement for the imposition of the restrictions upon subsequent-run exhibitors was *not* a prerequisite to an unlawful conspiracy. * * *

It is elementary that an unlawful conspiracy may be and often is formed without simultaneous action or agreement on the part of the conspirators. [Citing cases.] Acceptance by competitors, without previous agreement, of an invitation to participate in a plan, the necessary consequence of which, if carried out, is restraint of interstate commerce, is sufficient to establish an unlawful conspiracy under the Sherman Act. *Eastern States Lumber Assn. v. United States*, 234 U. S. 600; *Lawlor v. Loewe*, 235 U. S. 522, 534; *American Column Co. v. United States*, 247 U. S. 377; *United States v. American Linseed Oil Co.*, 262 U. S. 371. [Italics supplied.]

This language was cited with approval and applied in *United States v. Masonite Corp.* 316 U. S. 265, 275.

More recently, in *United States v. Bausch & Lomb Co.*, 321 U. S. 707, 723, the Court, holding that there was a conspiracy between Soft-Lite and various optical wholesalers, reaffirmed the principle plainly expressed in the *Interstate Circuit* opinion in saying:

• • • Whether this conspiracy and combination was achieved by agreement or by acquiescence of the wholesalers coupled with assistance in effectuating its purpose is immaterial.

DP attempts to nullify the effect of the *Interstate Circuit* and *Masonite* decisions by the assertion that in truth the Court merely held in those cases that in the circumstances recited, an agreement could be implied. Not only is this construction contradicted by the express language of the court, but in the *Interstate Circuit* case, the Court indicated that the finding of conspiracy would be justified even if the evidence had not supported the finding of an agreement among the distributors, and in the *Masonite* case, *supra*, the opinion states that there was an illegal price fixing combination.

• • • though the District Court found that, in negotiating and entering into the first agreements, each appellee, other than *Masonite*, acted independently of the

others, negotiated only with Masonite, desired the agreement regardless of the action that might be taken by any of the others, did not require as a condition of its acceptance that Masonite make such an agreement with any of the others, and had no discussions with any of the others * * * [pp. 275].

The lower federal courts have also recognized that the absence of an agreement does not preclude a finding of unlawful conspiracy. *United States v. Paramount Pictures*, 66 F. Supp. 323 (S. D. N. Y.). In *William Goldman Theaters v. Loew's, Inc.*, 150 F. 2d 738, 745 (C. C. A. 3), the court announced that:

* * * Uniform participation by competitors in a particular system of doing business where each is aware of the other's activities, the effect of which is restraint of interstate commerce, is sufficient to establish an unlawful conspiracy, under the statutes before us * * *

In *United States v. Tuffanelli*, 131 F. 2d 890, 893 (C. C. A. 7), the court held that a verdict of guilty on a conspiracy charge was justified by the evidence, since it was not

* * * necessary to establish that the acts of the defendants were pursuant to mutual agreement. It is enough if the proof shows that two or more persons, in voluntary cooperation, have participated in an enterprise which necessarily involves the commission of an indefinite number

of substantive offenses, *United States v. Wroblewski*, 7 Cir., 105 F. 2d 444.

It is also a well established principle that one who knowingly aids or cooperates in furthering an unlawful conspiracy, thereby becomes a party to it. *Martin v. United States*, 100 F. 2d 490 (C. C. A. 10), certiorari denied, 306 U. S. 649, 651; *Beard v. United States*, 82 F. 2d 837 (App. D. C.), certiorari denied, 298 U. S. 655; *Capriola v. United States*, 61 F. 2d 5 (C. C. A. 7), certiorari denied, 287 U. S. 671; *Coates v. United States*, 59 F. 2d 173 (C. C. A. 9); *Parnell v. United States*, 64 F. 2d 324 (C. C. A. 10); *Booth v. United States*, 57 F. 2d 192 (C. C. A. 10); *Di Bonaventura v. United States*, 15 F. 2d 494 (C. C. A. 4); *Simpson v. United States*, 11 F. 2d 591 (C. C. A. 4), certiorari denied, 271 U. S. 674; *Allen v. United States*, 4 F. 2d 688 (C. C. A. 7), certiorari denied, 267 U. S. 597, 598; *Rudner v. United States*, 281 Fed. 516 (C. C. A. 6), certiorari denied, 260 U. S. 734.

This rule was applied to a Sherman Act conspiracy in *United States v. Standard Oil Co.*, 152 Fed. 290 (E. D. Mo.), where the court stated at 294:

* * * One who learns of a conspiracy after it is formed, and then joins it, or knowingly aids in the execution of its scheme, and shares in its profits, becomes from that time as much a co-conspirator as if he were one of those who originally designed it and put it in operation [cases cited].

Although many conspiracy cases do speak in terms of agreement, express or implied, analysis of these cases shows that what was meant was nothing more than knowing cooperation in the furtherance of the illegal scheme. *Eastern States Retail Lumber Dealers' Assn. v. United States*, 234 U. S. 600; *American Column Co. v. United States*, 257 U. S. 377; *Direct Sales Co. v. United States*, 319 U. S. 703.

These decisions should dispose of du Pont's contention. du Pont accepted an invitation to participate in a plan the necessary consequence of which was restraint of interstate and foreign commerce. du Pont acted in accordance with its assurances and the other conspirators relied upon such assurances and acted in accordance therewith. du Pont received the benefits of the conspiracy. It hardly lies in the mouth of defendant du Pont now to argue that it entered the cartel with its fingers crossed. The Sherman Act is concerned with substance, not with form, *Standard Oil Co. v. United States*, 221 U. S. 1; insofar as the Sherman Act is concerned, the result must turn not on the skill with which counsel has manipulated language but on the significance of the business practices in terms of restraint of trade. *United States v. Masonite Corp.*, 316 U. S. 265, 280. The context of the lower court's opinion and findings makes clear that the "assurances" were conspiratorial in nature and resulted in concerted action violative

of the Sherman Act. Exercises in semantics must not be allowed to subvert enforcement of the Sherman Act.

13. *The trial court was correct in holding Exhibit E to be an unlawful agreement and that Standard Oil Company (Indiana) v. United States, 283 U. S. 163, does not hold to the contrary*

du Pont concedes that this agreement was found by the District Court to be unlawful (p. 94). If this finding is correct, du Pont's guilt is conclusively established, quite apart from its participation in the illegal international cartel and du Pont has therefore assumed the burden of overturning this finding as well as the finding of participation in the cartel. Its entire attack on this finding (pp. 85-107) is based upon a discussion of selected innocent circumstances preceding the making of the agreement coupled with the assertion that the court's finding of illegality was based upon the presence of three provisions respectively relating to future patents, technical exchange, and tonnage limitations, which were also present in *Standard Oil Company (Indiana) v. United States*, 283 U. S. 163²⁰ (the *Cracking* case). The fact that the parties to the agreements in the *Cracking* case were there found not guilty of violating the Sherman Act is then

²⁰ The Government had not based its claim of Sherman Act violation in the *Cracking* case upon the presence of such provisions.

said to be conclusive upon the liability of du Pont in this case.

du Pont argument ignores the fact that the finding of illegality in this case was necessarily based upon unreasonably restrictive effects flowing from the making of this agreement as revealed by the record made in this proceeding. The provisions referred to in du Pont's brief were merely recited in the court's findings. The findings which made this agreement illegal are those relating to the agreement itself (F. 79, R. 291-293), together with the finding (F. 95, R. 303-306) as to the effects of the agreements and understandings between the defendants, which, of course, includes this basic agreement. The later finding which sets forth in detail the effects necessarily flowing from the agreements previously found, including Exhibit E, states that "NL and DP control and dominate the manufacture and sale of titanium pigments and compounds in the United States to the exclusion of all actual or potential competitors" and that they "secured a monopoly of technical information" relating to the titanium business "to the exclusion and detriment of other producers" (R. 304-305). There were, of course, no such findings in the *Cracking* case, since the defendants in that case had not achieved by means of the challenged cross-licensing agreements, or otherwise, a collective position in the gasoline industry remotely

approaching that of either du Pont or national Lead in the industry here involved."

The preceding discussion in this brief of the facts in the record regarding du Pont's participation in the violations charged is sufficient to establish the validity of the findings as to the effects of this agreement. In the *Cracking* case, after pointing out that a pooling of process patents where domination exists (p. 174) or a cross-licensing agreement used to effect a monopoly (p. 175) would violate the Sherman Act, the Court said, "We must, therefore, examine the evidence to ascertain the operation and effect of the challenged contracts" (p. 175). Thus, du Pont's attempt to convert the question of the validity of this agreement into a matter of abstract law by reliance on the *Cracking* case fails at the outset. When the findings in this case as to the effects of the agreement are compared with the Court's conclusions in the *Cracking* case that the evidence there showed "no monopoly, or restriction of competition," in the production (p. 177) or sale (p. 178) of gasoline and that "no monopoly of any kind, or restraint of interstate commerce, has been effected either by means of

²⁷ As the Supreme Court said in the *Cracking* case (283 U. S., at 176): "The output of cracked gasoline in the years in question was about 26 percent of the total gasoline production. Ordinary or straight run gasoline is indistinguishable from cracked gasoline and the two are either mixed or sold interchangeably."

the contracts or in some other way" (p. 179), the attempted analogy becomes absurd.

It is immaterial for present purposes whether Exhibit E would be illegal in isolation. The setting and effect of the agreement in conjunction with other understandings and the conduct of the parties unquestionably brings the case within the caveats in the *Cracking* case that patent pooling agreements where domination exists (which obviously means domination outside of the agreement) or which effects a monopoly would be unlawful.

Even without consideration of the actual exclusionary and monopolistic effects of this agreement found by the court, below, it is apparent that the mere making of such an agreement by two parties who themselves represent the sole domestic possessors of patent rights and technology required to engage in a particular industry could never be justified under the Sherman Act. Obviously, those who dominate an industry are under different Sherman Act disabilities in dealing with each other than those who are merely seeking a competitive foothold. The agreement on its face was one which embraced entire fields of business activity in which there were then no domestic competitors of the parties and was by its express terms an obvious device for preventing the entrance of potential competitors into the fields covered, except on terms fixed by the defendants. The permanent nature of the licenses granted, the

wide scope of the present and future patent coverage, and the complete inclusion of all technical data relating to the field covered, regardless of its application to any particular patent licenses, all show that the parties must have contemplated exactly the result that the evidence showed they achieved. When an agreement of this character, made by such parties, is coupled with a record of performance showing that the contemplated exclusionary effects were actually achieved, there can be no question as to its illegality. The *Cracking* case supports this conclusion rather than the contrary.

II

THE PROVISION OF PARAGRAPH 7 REQUIRING DU PONT AT THE REQUEST OF A LICENSEE UNDER PARAGRAPH 7 TO IMPART IN WRITING THE METHODS AND PROCESSES USED BY IT IN ITS COMMERCIAL PRACTICE UNDER THE LICENSED PATENTS WAS NEITHER BEYOND THE POWER OF THE DISTRICT COURT NOR AN ABUSE OF DISCRETION

Du Pont requests elimination of the requirement that it must, at the request of a licensee under paragraph 7, impart in writing, at a reasonable charge, the method and processes used by DP at the date of the license in its commercial practice under the licensed patents in connection with the production of titanium pigments. The Government in No. 89 has contended that this provision should be amended to provide access to the entire technology of the industry. Brief

pp. 127-131. The argument in support of that contention answers most of the arguments now made by du Pont. We will here consider only arguments not answered in our brief in No. 89. It is important to note that DP agrees that the possession of this technology is a competitive advantage (DP Br. 115-116) and that in an infant industry competition will benefit by access to the technology of competitors (*ibid.* 115-119). Its further statement that this is a mature industry disregards the obvious fact that while it may be mature as to the defendants it is, as a result of the unlawful conspiracy, an infant industry to all others.

While vigorously contending that it would have been impossible for it to have entered the industry in competition with National Lead without access to the technology of National Lead (DP Br. 119), DP asserts that any who now wish to compete with DP and NL can do so effectively without access to the technology which they have accumulated. It implies, without stating, that this technology is now readily available to all (DP Br. 115). There is nothing to support this implication in the record, and it strains credulity to believe that this valuable and closely guarded secret has been revealed. Moreover, it can find no support for its contention in the fact that Zirconium and VC have been able to operate without access to its technology. The District Court specifically found that the defendant's

monopoly of technology was to the exclusion and detriment of the other producers engaged in the titanium pigment business in the United States (R. 305).

That DP did not exchange technology with its co-conspirators after 1940 does not militate against compulsory disclosure. Basically, the relief requested is predicated upon the fact that access to this technology is essential to dissipate the effects of the conspiracy. Its availability does not turn upon a showing that it was acquired as the product of an unlawful agreement. However, it is obvious that a vast amount of DP's current technology was acquired as a result of the unlawful combination and that this information was a prerequisite to any additional technology DP may have acquired since 1940. Moreover, even if there was any basis for treating DP's after-acquired technology on a different basis, the fact remains that it is utterly impossible to segregate the technology acquired as a result of the conspiracy and that technology which is in no way dependent upon that acquired prior to 1940. Since no segregation can be made, under settled principles of law all the technology must be similarly treated. See brief for the United States No. 89, pp. 118-121.

DP argues that a court of equity will not exercise its discretion to prevent irreparable injury when it is impractical to determine if there has been compliance with its order. We do not

find persuasive the notion that DP should not be required to divulge technology acquired, at least in large part, as a result of an unlawful conspiracy when necessary to dissipate the effects of its unlawful conduct, on the ground that a court would find it difficult to determine if du Pont was complying in good faith with the court's order. But, in any event, the suggested practical difficulties do not exist. Much of the technology obviously does not and cannot reside exclusively in the minds of DP's employees; and there would be no problem in determining if this technology were made available. As to that in the minds of defendant's employees, the capacity of the technology divulged to produce that which DP itself produces furnishes an adequate test. Moreover, a mere inspection of the plant and operations of DP by a skilled technician would quickly detect an incomplete or inaccurate disclosure. Finally, we suggest that the problem of enforcement is one which arises only in the course of enforcement proceedings, and, to the extent that enforcement is difficult, the Government rather than DP is hurt.

DP's contention that a court is without power to compel disclosure of technology is based primarily upon the decision of this Court in the *Hartford Empire* case, 323 U. S. 386. The Government's views with respect to this decision and the effect which should be given to it are set forth

in its brief in No. 89, pp. 104-123, 130, and will not be repeated here.

III

THE PROVISIONS OF PARAGRAPHS 5 AND 6 OF THE JUDGMENT DO NOT UNDULY RESTRICT NATIONAL LEAD'S RIGHT TO CONTRACT.

Defendant NL contends that paragraphs 5 and 6 of the judgment, quoted below, should be amended by deleting the italicized words and inserting the capitalized word:

5. The following agreements are hereby adjudged to be unlawful under Section 1 of the Sherman Act and each of them is hereby cancelled *and the defendants and each of them and all persons acting or claiming to act through, for or under them and all successors and subsidiaries of any of the defendants are hereby enjoined and restrained from the further performance of any of the provisions of said agreements and of any agreements amendatory thereof or supplemental thereto:* [followed by a list of the cancelled agreements].

6. Each of the defendants and each of their directors, officers, agents, employees, successors and subsidiaries and all persons acting, or claiming to act under, through or for them or any of them are hereby enjoined and restrained (a) *from entering into, adhering to, maintaining or furthering, directly or indirectly, or claiming any rights under any contract, agreement, understanding, plan or program among them-*

selves, the co-conspirators, or with any other person, partnership or corporation, which has as its purpose or effect the continuing or renewing of ~~any~~ of the agreements listed in paragraph 5 hereof; (b) from entering into, adhering to, maintaining or furthering, directly or indirectly, any contract, agreement, undertaking, plan or program with any other producer or dealer relating to titanium pigments which has as its purpose or effect (1) to divide sales or manufacturing territories, (2) to allocate markets, (3) to limit or prevent United States imports or exports, (4) to grant to any third party any market as its exclusive territory, (5) to keep any third party out of any market; provided, however, that nothing contained in this subdivision (b) of this paragraph 6 shall prohibit any normal and usual arrangements between any defendant and its directors, officers, employees, agents, subsidiaries, or any PRODUCER, dealer, or distributor, whether or not a co-conspirator; (c) from restricting any purchaser of titanium pigments in the use thereof.

These paragraphs go no further than is reasonably necessary to grant effective relief. The contracts enumerated in paragraph 5 were some of the instrumentalities through which the international cartel was created and the defendants' power to dominate and control the interstate and foreign commerce of the United States in titanium pigments was acquired. That these contracts,

specifically found to violate the Act (R. 310-311), a finding not challenged in this Court, should be cancelled is conceded by NL and beyond dispute. To implement that cancellation, the judgment enjoins the further performance of any of the provisions of the cancelled contracts. It also enjoins the further performance of any existing agreement amendatory of or supplemental to any of the cancelled agreements. This implementation was necessary to insure that all existing agreements should henceforth be unenforceable and also to create a sanction against disregard of the order of cancellation. Since this paragraph deals solely with the future enforceability of existing contracts, NL's contention that the deletion of the italicized portion is necessary in order to remove barriers to future contracts is incorrect.

Paragraph 6 deals with future contracts. Clause (a) enjoins the defendants from entering into or adhering to any agreement, plan or program "which has as its purpose or effect the continuing or renewing of any of the agreements" enumerated in paragraph 5. Since the enumerated agreements were found to violate the Act, this provision can impose no unjustified restriction on NL's power to contract.

NL's contention that the proviso in clause (b) of paragraph 6 should be amended to include producers, is based upon vague unsupported allegations of hardship. Such allegations furnish no basis for a conclusion that that district court abused

its discretion. If, at some future time, National Lead can demonstrate that its right of contract has been unduly restricted, it may apply to the district court for a modification of the judgment.

IV

THE TRIAL COURT DID NOT ABUSE ITS DISCRETION IN REFUSING TO PERMIT NL AND ITS FOREIGN CO-CONSPIRATORS JOINTLY TO OWN FOREIGN PRODUCERS OF TITANIUM PIGMENTS

Defendant NL contends that the provisions of paragraph 8 of the judgment are an abuse of the trial court's discretion and should be eliminated (NL Br. 64, 99). This paragraph requires NL and Tinc, within one year from the date of the judgment, to present to the Court a plan for divesting themselves, within two years, of all their stockholdings and other financial interests in the British, Canadian, German, and Japanese companies, or for the purchase of the entire holdings and other financial interests of the foreign co-conspirators in these companies (R. 314).²²

The circumstances under which the stock and other financial holdings in these companies were acquired are set forth in detail in the Statement in the brief for the United States in case No. 89, this Term, pp. 16-22. Briefly stated, these holdings were acquired in consummating a plan to

²² NL states that it has entered into an agreement to purchase all of the stock of CTP and, therefore, consideration of the relationship between NL and CTP has been taken out of this case (NL Br. 66).

utilize TAS (the predecessor of Tinc) and its rights under the 1920 contract further to control competition in all markets of the world, including competition in the interstate and foreign commerce of the United States. The plan was as follows: TAS was to form in each of the important industrial countries, in association with a local company which contemplated the manufacture or sale of titanium pigments or which could contribute to the commercial or technical development or which threatened to be a serious competitor of NL or TAS, a new company in which NL or TAS was to have a part interest. Each company so formed was to be given as its exclusive territory a portion of the territory assigned to TAS by the 1920 agreement and was to refrain from competing with NL in its exclusive territory or in the exclusive territory of any other company associated with NL. All of the present and future patents of NL or TAS or of any of the companies associated with either in the formation of such new companies, as well as those of the new companies to be organized, were to be licensed exclusively to NL for North America and to the new companies to be organized for their respective territories and to TAS for the rest of the world. Pursuant to this plan, TAS entered into agreements with the most important potential competitors in Germany, England, Canada, and Japan, which resulted in

the formation and joint ownership of TG, BTP, CTP, and TK.

The trial court found that these agreements were in violation of the Act and ordered them canceled (R. 310-311). However, the consummation of the plan with the resulting joint ownership of the foreign producers created a condition inherently destructive of competition. The foreign co-owners will not otherwise enter into the business so long as they are substantial owners in a company engaged in the titanium pigment business; a jointly owned company is not likely to export to the United States to compete with NL, the owner of a substantial block of its shares, and NL will not export to markets now served by its affiliated jointly owned companies. Indeed, it is difficult to believe that NL would be so intent upon remaining a co-owner of these companies if it expected serious competition to arise between it and them or between them.

The Government contended below that these jointly owned foreign competitors, having been formed for the purpose and having the necessary effect of suppressing competition with the defendants in the interstate and foreign commerce of the United States, should be freed from the influence of National Lead. It therefore requested divestiture by National Lead of its stock interest in these jointly owned companies. The trial court granted this request but permitted NL, as an alternative to divestiture, to

purchase the entire remaining financial interests of its co-conspirators in the jointly owned companies. This alternative was apparently permitted upon the theory that adequate relief would be afforded if the association or community of interest between NL and its co-conspirators was terminated. The effect of this was to permit National Lead to continue to control the major foreign producers of titanium pigments and to exclude competition from foreign producers unless and until National Lead's foreign partners should organize new companies to engage in the titanium pigment business."

Defendant NL now contends that it was an abuse of discretion to prohibit continued joint ownership of the foreign producers. It argues that nobody can assert with assurance that the prohibition will, in fact, stimulate foreign trade (NL Br. 51). But it would not be material if foreign competition could not be assured. There are few cases in which a court can compel or assure competition, especially when the potential competitor is located in a foreign country. Yet this does not relieve the court from the duty to remove unlawfully created obstacles to the rise of competition or terminate an unlawful association of competitors. The very theory of the Act is that in the absence of unlawful restric-

Although not persuaded that this is a proper provision, the Government has not assigned it as error and will not attack it in this case.

tions the profit motive will develop competition. In this connection it is material that continued joint ownership will, as we have shown, substantially prevent the development of future competition from the foreign producers. Certainly a court does not abuse its discretion when it refuses to foreclose the competition the Act was designed to promote.

As a supplemental argument National Lead contends that the injunctive relief granted by the judgment would eliminate the evil of joint ownership. This contention disregards the obvious fact that restraint is inherent in the arrangement, and that agreements such as those proscribed by the judgment are unnecessary. But apart from this consideration, entering into such agreements would be facilitated and their detection rendered virtually impossible by continued joint ownership, since the books, records of shipments, and other relevant data would be located in a foreign country beyond the jurisdiction of the court. Under these circumstances it is not an abuse of discretion to prohibit joint ownership. As this Court said of an analogous situation in *United States v. Crescent Amusement Co.*, 323 U. S. 173, 189-190:

The fact that the companies were affiliated induced joint action and agreement. Common control was one of the instruments in bringing about unity of purpose and unity of action, and in making the con-

spiracy effective. If that affiliation continues, there will be tempting opportunity for these exhibitors to continue to act in combination against the independents. The proclivity in the past to use that affiliation for an unlawful end warrants effective assurance that no such opportunity will be available in the future.

National Lead suggests that an American concern can most satisfactorily engage in business in foreign countries by combining with foreign concerns to create a joint enterprise. From this it argues that such arrangement should be regarded as one of the "normal and usual" commercial arrangements for expanding trade which this Court said were exempted from the Act by the so-called "rule of reason." We do not agree that the "rule of reason" can be invoked to legitimize arrangements so contrary to the basic policy of the Act. However, it is not necessary to determine this question. The issue here is the quantum of relief the trial court was justified in granting to dissolve and to dissipate the effects of an unlawful combination and not whether the series of partnership arrangements standing alone would be unlawful. As Mr. Justice Douglas stated in his concurring opinion in *Associated Press v. United States*, 326 U. S. 1, 24:

* * * it is well settled that a feature of an illegal restraint of trade, which is innocent by itself and which may be lawfully used if independently established, may be

uprooted along with the other parts of an illegal arrangement. *Ethyl Gasoline Corp. v. United States*, 309 U. S. 436, 461; *United States v. Univis Lens Co.*, 316 U. S. 241, 254.

United States v. Bausch & Lomb Co., 321 U. S. 707, 724, is to the same effect. In this connection it is apparent that the joint ownership of these companies was promoted for an illegal purpose, was an integral part of the unlawful combination, and, if permitted to continue, will perpetuate some of its unlawful effects.

NL's contention that the prohibition against joint ownership will cause it a pecuniary loss rests upon the bare unsupported assertion that NL will not receive the full value of its shares in BTP. Moreover, if this were true, there is no way of accurately measuring the loss of NL since it cannot be shown how much of the present value of the shares is the product of the illegal combination. But even if NL will suffer a loss, this is no reason for voiding the order of the trial court. In *United States v. Crescent Amusement Co.*, 323 U. S. 173, 189, this Court said, in overruling a contention that divestiture should not be granted:

Those who violate the Act may not reap the benefits of their violations and avoid an undoing of their unlawful project on the plea of hardship or inconvenience.

See also Brief for the United States in No. 89, this Term, pp. 114-117.

CONCLUSION

For the above reasons it is respectfully submitted that the exceptions raised by the defendants to the judgment below are without merit.

Respectfully submitted.

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JANUARY 1947.

SUPREME COURT OF THE UNITED STATES

Nos. 89, 90, 91.—OCTOBER TERM, 1946.

The United States of America,
Appellant,

89

v.

National Lead Company, Titan Company, Inc., and E. I. du Pont de Nemours and Company.

National Lead Company, and Titan Company, Inc., Appellants,

90

v.

The United States of America.

E. I. du Pont de Nemours and Company, Appellant,

91

v.

The United States of America.

On Appeals from
the District
Court of the
United States
for the South-
ern District of
New York.

[June 23, 1947.]

MR. JUSTICE BURTON delivered the opinion of the Court.

This action was brought by The United States of America, June 24, 1944, in the District Court of the United States for the Southern District of New York, against National Lead Company (a New Jersey corporation, here called National Lead or NL), its wholly owned subsidiary, Titan Company, Inc. (a Delaware corporation, here called Titan Inc. or Tinc) and E. I. du Pont de Nemours and Company (a Delaware corporation, here called du Pont or DP). It is a proceeding in equity instituted under § 4 of the Sherman Antitrust Act, 26 Stat. 209, 36 Stat. 1167, 15 U. S. C. § 4, to prevent and restrain alleged violations of §§ 1 and 2 of that Act, 26 Stat. 209, 50 Stat. 693, 15 U. S. C. §§ 1 and 2. The trial was conducted by Judge Simon H. Rifkind of that court. It began December 4, 1944, and ended March 14, 1945. His opinion was filed July 5, 1945. His 96 findings of fact and two conclusions

of law were entered October 2, 1945. After extended consideration of its terms, by the court and by counsel for all parties, the decree was entered October 11, 1945. The opinion and decree are reported in 63 F. Supp. 513-535. The findings of fact, conclusions of law and much of the detailed discussion of the decree are in the record. Separate appeals were filed in this Court, in case No. 89 by the United States, in case No. 90 by National Lead and Titan Inc. and in case No. 91 by du Pont. The three companies are sometimes referred to as "the appellant companies." We noted probable jurisdiction in each appeal, May 20, 1946, and the three appeals were argued together February 3-5, 1947. A partial stay of the decree had been granted by Mr. JUSTICE REED, on January 2, 1946, pending determination of the appeals. Reference is made to the opinion of the District Court for a recital of the complex facts which it had to consider in order to reach its conclusion that National Lead, Titan Inc. and du Pont each violated § 1 of the Sherman Act,¹ although it found a marked difference between the conduct of National Lead and of its subsidiary, Titan Inc., on the one hand, and that of du Pont on the other. This Court affirms the judgment of the District Court, except as to the original effective dates of certain of its provisions, and our discussion will relate largely to the assignments of error as to the terms of the decree.

I. The first issue presented to the District Court was that of the participation of National Lead and Titan Inc.

¹ "SECTION 1. Every contract, combination in the form of trust or otherwise, or conspiracy, in restraint of trade or commerce among the several States, or with foreign nations, is hereby declared to be illegal: . . . Every person who shall make any contract or engage in any combination or conspiracy hereby declared to be illegal shall be deemed guilty of a misdemeanor, and, on conviction thereof, shall be punished by fine not exceeding \$5,000, or by imprisonment not exceeding one year, or by both said punishments, in the discretion of the court. 50 Stat. 693-694, 15 U. S. C. § 1.

in a so-called "international cartel" dating back to 1920, and constituting a combination or conspiracy in restraint of trade and commerce in titanium pigments and compounds, among the several states of the United States and with foreign nations, which combination, after 1933, was alleged to include du Pont. The District Court found such participation.* In their brief on appeal in No. 90, National Lead and Titan Inc. said:

"The Government's case was based on a series of closely related agreements made between 1920 and 1944. The agreements have been cancelled and continuation or renewal has been enjoined. The appeals are greatly simplified by the fact that we accept the cancellation and the injunction against continuation or renewal. We submit, however, that the court went too far in forbidding normal and usual contractual arrangements."

Accordingly, the finding of the District Court, as to the participation of National Lead and Titan Inc. in the violation of § 1 of the Sherman Act, is accepted here without further discussion.

II. The second issue was that of the participation of du Pont in such combination after 1933. The District

* The conclusions of law of the District Court were as follows:

"1. Beginning on or about July 30, 1920, NL and co-conspirator TAS [Titan Co. A/S to which Titan Inc. became a successor in interest] and on various dates thereafter Tine, DP and the others found herein to be co-conspirators continuing at all times thereafter to the date of these findings have been continuously engaged in a combination and conspiracy in restraint of trade and commerce in titanium pigments and compounds among the several states of the United States and with foreign nations and have been and are now parties to contracts, agreements and understandings in restraint of such trade and commerce.

"2. Plaintiff is entitled to a decree." See also, *United States v. National Lead Co.*, 63 F. Supp. 513, 527, 531, 532.

Court found that du Pont "joined the conspiracy found herein to exist between, NL and its foreign associates. DP's status rights and obligations were different from those of the other members of the combination. DP did not thereafter withdraw." Finding of Fact 73. The District Court, in its opinion, also stated that—

"At least then as to territorial delimitations of the titanium pigment business, DP joined the combination. . . .

"My general summary of the evidence on this issue is that DP was a member of the combination—true, a special member, with a status, rights and obligations, different from that of the other members, but a member nonetheless." 63 F. Supp. at 530, 531, and see the preamble to the decree at 532.³

This finding is contested vigorously by du Pont and is the principal subject matter of its appeal in No. 91. After careful consideration, we agree with the following conclusion of the District Court:

"In sharp contrast with NL, DP exhibited, from the very beginning of its interest in titanium, an alert consciousness of the anti-trust laws and moved cautiously and under the guidance of trained anti-trust lawyers. The question is whether it succeeded in avoiding not only the form but also the substance of transgression. I have concluded that it has not;" *Id.* at 527.

It would serve no beneficial purpose to review here the evidence upon which that court based its conclusion. Its opinion analyzes the facts (*Id.* at 527–531) and, in the light of the record as a whole, we find in those facts the support necessary for the conclusion reached.

³ See note 4, *infra*.

III. Related to these issues was a third. This was whether the contract between National Lead and du Pont was offensive to the antitrust laws apart from the relation of that contract, and of the parties thereto, to the foreign producers. The District Court found that it was and also related it to the international situation. It found that—

"The defendants NL, DP and Tinc have utilized their patents which relate to the manufacture and use of titanium pigments to control and regulate the manufacture and sale of titanium pigments and compounds in the United States; and NL and Tinc with the co-operation of DP have done so throughout the rest of the world." Finding of Fact 95, subparagraph 9.

In its opinion the District Court emphasized also "the great power they acquired" (*Id.* at 531) and indicated criticism of limitations originally inserted in certain important licenses, although later removed from them. *Id.* at 532. Added together, the control of the patents covered by this agreement gave to National Lead and du Pont "domination and control over the titanium pigment business in the U. S." Finding of Fact 79. The District Court referred to the "proliferation of patents" as another "inevitable consequence" of the agreement. *Id.* at 532. This was explained to mean the great multiplication of related patents, resulting in increasing the difficulty of an attack upon them. The validity of none of the hundreds of patents involved has been litigated.

"These patents, through the agreements in which they are enmeshed and the manner in which they have been used, have, in fact, been forged into instruments of domination of an entire industry. The net effect is that a business, originally founded upon

patents which have long since expired, is today less accessible to free enterprise than when it was first launched." *Id.* at 532.

Referring to the exchange of patents between National Lead and du Pont, the District Court added:

"... in the context of the present case, ... this exchange between two corporations, who between them controlled the entire market, becomes an instrument of restraint, available for use and used, to continue the mastery of the market which NL and DP achieved by means of the illegal international agreements." *Id.* at 532.

These facts are important not only in affirming, as we do, the finding that National Lead, Titan Inc. and du Pont each has violated § 1 of the Sherman Antitrust Act, but also in passing upon the terms of the decree entered in order to prevent future violations of that Act by them.

IV. The remaining issues relate to the terms of the decree. The entire decree, exclusive of its Appendix, is reported at 63 F. Supp. 532-535, and, for reference purposes, is here reprinted in the margin, as there reported.*

* "This cause came on to be heard upon the complaint and the answers thereto upon the evidence and upon argument of counsel. The Court having thereafter rendered and filed its opinion and having made and entered findings of fact and conclusions of law wherein the defendants have been found to have been engaged in a combination in restraint of trade and commerce in titanium pigments among the several states of the United States and of foreign nations, and that the defendants have been and now are parties to contracts, agreements, and understandings in restraint of such trade and commerce in violation of Section 1 of the Sherman Act, 26 Stat. 209, 15 U. S. C. A. § 1;

"Now, therefore, upon motion of plaintiff by Wendell Berge, Assistant Attorney General, Herbert Berman and William C. Dixon, Special Assistants to the Attorney General, Julian Caplan and Ephraim Jacobs, Special Attorneys, and John F. X. McGobey, United States Attorney, for relief in accordance with the prayer of the

This decree represents a careful attempt to fit the remedy to the needs of this case. The record upon which

complaint, and the defendants having severally appeared by counsel, it is ordered, adjudged and decreed as follows:

"1. The term 'titanium pigments' as used herein shall mean any product containing two percent (2%) or more of the element titanium in a chemically, mechanically or physically combined state and mixtures thereof which can be used as pigments, whether or not adapted for other uses, and also extenders to be used in conjunction with any such product.

"2. The term 'defendants' shall mean the corporations hereinafter listed who may be identified by the designated abbreviations:

NL	National Lead Company
Tinc	Titan Company, Inc.
DP	E. I. du Pont de Nemours and Company

"3. The term 'co-conspirators' shall mean the corporations hereinafter listed, who may be identified by the designated abbreviations:

TP	The Titanium Pigment Company, Inc.
Krebs	Krebs Pigment & Color Corporation
TAS	Titan Co. A/S
IG	Interessengemeinschaft Farbenindustrie Aktiengesellschaft
TG	Titangesellschaft m.b.H.
SIT	Société Industrielle du Titane
ICI	Imperial Chemical Industries, Ltd.
GW	Goodlass Wall and Lead Industries, Ltd.
ISC	Imperial Smelting Corporation, Ltd.
BTP	British Titan Products Company, Ltd.
NTP or Laporte	National Titanium Pigments, Ltd.
CIL	Canadian Industries, Ltd.
CTP	Canadian Titanium Pigments, Ltd.
Kokusan or KK	Kokusan Kogyo Kabushiki Kaisha
TK	Titan Kogyo Kabushiki Kaisha
Terres Rares Thann	Société des Produits Chimiques des Terres Rares Fabriques des Produits Chimiques de Thann et de Mulhouse
Montecatini Ausag	Societa Anonima Titanium Verein für Chemische und Metallurgische Produktion

it is based consists of two large volumes of testimony and four larger volumes of exhibits, representing a total of

"4. The term 'patents as herein defined' shall mean United States letters patent and applications as follows: (a) the letters patent and patent applications listed in Appendix A hereof; (b) all divisions, continuations or reissues of any of the foregoing patents and applications; (c) all patents issued upon such applications; (d) all patents which cover any titanium pigments or any process for the manufacture of titanium pigments issued to any of the defendants within five years from the date of this decree; and all such patents which any of the defendants acquires within such five years; and all such patents of which any of the defendants becomes the exclusive licensee within such five years with power to sublicense.

"5. The following agreements are hereby adjudged to be unlawful under Section 1 of the Sherman Act and each of them is hereby cancelled and the defendants and each of them and all persons acting or claiming to act through, for or under them and all successors and subsidiaries of any of the defendants are hereby enjoined and restrained from the further performance of any of the provisions of said agreements and of any agreements amendatory thereof or supplemental thereto:

- Agreement dated July 30, 1920, between TP and TAS (Exhibit A);
- Agreement between TP and Krebs dated January 1, 1933, as amended January 1, 1941 (Exhibits E and E-3);
- Agreements dated July 30, 1920, between NL, TP, The Titanium Alloy Manufacturing Company and TAS (Exhibits A-1 and A-2);
- Agreement between TAS and SIT dated March 3, 1927 (Exhibit B);
- Agreement between TAS and IG dated October 3 and 20, 1927 (Exhibit C);
- Agreement between TAS and IG signed June 24 and October 20, 1927 (Exhibit C-1);
- Agreement between TAS and TG signed October 3 and 20, 1927 (Exhibit C-3);
- Agreement between TG and TAS dated October 3 and 20, 1927 (Exhibit C-7);
- Agreement between TG and TAS dated October 3 and 20, 1927 (Exhibit C-8);
- Agreement dated February 16, 1933 between ICI, ISC, GW and TINC (Exhibit F);
- Agreements between TINC, SIT, TERRES RARES, and Thann

over 5,500 pages, reflecting more than three months of trial. It demonstrates a commendable procedure. Fro-

dated June 5 and 17, 1935 (Exhibits G-1 and G-2);

Agreements between TINC, TERRES RARES, and IG, and between TINC, Terres Rares, IG, TG, Thaim, and Doitsu [Doitsu Senryo Gomei Kaisha, Kobe/Japan] both dated January 18, 1935 (Exhibits J and J-2);

Agreement between NL and CIL dated January 1, 1937 (Exhibit K);

Agreement between NL and CTP dated January 1, 1937, as amended February 27, 1939 (Exhibits K-1 and K-5);

Agreements between DP and TINC dated July 27, 1937, June 20, 1938, April 21, 1939, May 10, 1940, and June 23, 1941 (Exhibits M, N, Q, R and S), and the

'License Field Extender' agreements to which NL or TINC were parties, including the agreement between NL and TINC dated March 28, 1939 (Exhibit O);

provided, however, that the provisions of this paragraph with respect to the agreements between TP and Krebs dated January 1, 1933, as amended January 1, 1941 (Exhibits E and E-3) shall not go into effect until the expiration of ~~the~~ months from the date of this decree.

"6. Each of the defendants and each of their directors, officers, agents, employees, successors and subsidiaries and all persons acting, or claiming to act under, through or for them or any of them are hereby enjoined and restrained (a) from entering into, adhering to, maintaining or furthering, directly or indirectly, or claiming any rights under any contract, agreement, understanding, plan or program among themselves, the co-conspirators, or with any other person, partnership or corporation, which has as its purpose or effect the continuing or renewing of any of the agreements listed in paragraph 5 hereof; (b) from entering into, adhering to, maintaining or furthering, directly or indirectly, any contract, agreement, undertaking, plan or program with any other producer or dealer relating to titanium pigments which has as its purpose or effect (1) to divide sales or manufacturing territories, (2) to allocate markets, (3) to limit or prevent United States imports or exports, (4) to grant to any third party any market as its exclusive territory, (5) to keep any third party out of any market; provided, however, that nothing contained in this subdivision (b) of this paragraph 6 shall prohibit any normal and usual arrangements between any defendant and its directors,

posed findings of fact and conclusions of law were submitted on behalf of the respective parties and a form of

officers, employees, agents, subsidiaries, or any dealer or distributor, whether or not a co-conspirator; (c) from restricting any purchaser of titanium pigments in the use thereof.

"7. Each of the defendants is ordered to grant to any applicant therefor, including any defendant or co-conspirator, a non-exclusive license under any or all of the patents as herein defined at a uniform, reasonable royalty. Such grant may, at the option of the licensor, be conditioned upon the reciprocal grant of a license by the applicant, at a reasonable royalty, under any and all patents covering titanium pigments or their manufacture, now issued or pending, or issued within five years from the date of this decree, if any, owned or controlled by such applicant. Such license or reciprocal license may, at the option of either party, contain a provision for the inspection of the books and records of the licensee by an independent auditor who shall report to the licensor only the amount of royalty due and payable and no other information. During a period of three years from the date of this decree such license or reciprocal license may at the option of either party contain a provision for the imparting in writing, at a reasonable charge, by the licensor to the licensee, of the methods and processes used by the former at the date of the license in its commercial practice under the licensed patents in connection with the production of titanium pigments. The Court reserves jurisdiction to pass upon the reasonableness of any royalty or charge herein directed to be reasonable. Defendants are restrained from attempting to enforce any rights under any foreign patents owned by them or under which they are the exclusive licensees to prevent the exportation of titanium pigments from the United States to any foreign country.

"8. Within one year from the date of this decree, defendants NL and Tine shall present to the Court for its approval a plan for divesting themselves of their stock holdings and other financial interest, direct and indirect, in BTP, CTP, TG and TK, or for the purchase of the entire stock holdings and other financial interests, direct and indirect, in said companies or any of them. Such plan of sale shall not provide for the transfer of such stock or interest to any other defendant or to any corporation in which any defendant will, upon consummation of the plan, have any interest, provided that this provision shall not preclude transfer of said defendants' stock holdings in BTP to ISC, GW, and ICI, or any of them, or preclude transfer of said defendants' stock holdings in CTP to CIL. The

decree was submitted on behalf of the Government to the District Court immediately following the trial. The

plan shall provide for its completion within two years from the date of this decree.

"9. Either American Zirconium Corporation or Virginia Chemical Corporation, their successors or assigns, may at their option, if exercised within six months from the date of this decree, apply for licenses from DP under the provisions of paragraph 7. In the event American Zirconium Corporation, Virginia Chemical Corporation or their respective successors or assigns exercise the foregoing option, DP is enjoined from collecting royalties under any existing license agreement relating to titanium pigments between it and the person exercising the option in respect of any period subsequent to such exercise. Defendants NL, Tinc and DP are hereby enjoined from bringing, or threatening to bring, any action against any person or corporation for the alleged infringement prior to the date of this decree of any patent as herein defined.

"10. The Attorney General of the United States or his proper representative shall, for the purpose of securing compliance with this decree, be permitted (1) access, during the office hours of the defendants, to all books, ledgers, accounts, correspondence, memoranda, and other records and documents in the possession or under the control of the defendants, relating to any matters contained in this decree, (2) subject to any legally recognized privilege, without restraint or interference from the defendants, to interview officers or employees of the defendants, who may have counsel present, regarding any such matters; provided, however, that information obtained by the means permitted in this paragraph shall not be divulged by any representative of the Department of Justice to any person other than a duly authorized representative of the Department of Justice except in the course of legal proceedings for the purpose of securing compliance with this decree in which the United States is a party or as otherwise required by law.

"11. Judgment is entered against the defendants for all costs to be taxed in this proceeding.

"12. The cancellation, injunctions and all executory action provided for under this decree shall not become effective or operative until ninety days from the date of this decree.

"13. Jurisdiction of this cause, and of the parties hereto, is retained by the Court for the purpose of enabling any of the parties to this decree, or any other person or corporation that may hereafter become bound, in whole or in part, thereby to apply to the Court at any

opinion of the District Court, when filed, formed the basis of further consultation and argument. After the District Court's findings of fact and conclusions of law were entered, further conferences were held with counsel and full opportunity was given to them to propose changes in the findings of fact and the decree. Much of this discussion was reported in the record and has been of benefit to this Court in reviewing the decree.

In our opinion, the provisions of this decree, to a large extent, are matters lying within the discretion of the District Court as a court of equity whose duty it was to make the remedy as effective as possible. The District Court was confronted with an obligation to give effect to the provisions, on the one hand, of the patent laws granting certain valuable rights in the nature of monopolies to the patentees and their licensees, and also to give effect, on the other hand, to the provisions of the Sherman Antitrust Act prohibiting any combination or conspiracy in restraint of trade among the several states or with foreign nations. We believe that the District Court has not exceeded its discretion in the provisions of this decree but has employed its discretion with commendable fairness having especial regard to the needs of this case. It has succeeded in keeping within the lines of precedent thus far established, although, in this field, such lines cannot be much

time for such further orders, modifications, vacations or directions as may be necessary or appropriate.

- (1) for the construction or carrying out of this decree, and
- (2) for the enforcement of compliance therewith and the punishment of violations thereof."

"Appendix A" consists only of the identification of National Lead's 82 patents and 20 applications for patents; Titan Inc.'s 19 patents and 1 application; Titan Co. A/S's 2 patents; I. G. Farbenindustrie's 22 patents; Titan-gesellschaft's 2 patents; and du Pont's 175 patents and 30 applications. The references in the decree to Exhibits refer to such exhibits as they are identified in the record of this case in the District Court.

more than guides. The essential consideration is that the remedy shall be as effective and fair as possible in preventing continued or future violations of the Antitrust Act in the light of the facts of the particular case.

The issues are presented by the assignments of error in the three appeals. They will be considered separately in conjunction with their supporting arguments. In each instance we sustain the present decree.

A. Request to omit the requirement of the granting of compulsory, nonexclusive licenses at uniform, reasonable royalties and to substitute for that requirement, either a perpetual injunction against the enforcement of the titanium patents presently owned or controlled by the respective appellant companies, or a provision for compulsory licenses to be issued under those patents, free of royalties.

This is the major legal issue in this case.

The material provisions in the present decree are as follows:

"4. The term 'patents as herein defined' shall mean United States letters patent and applications as follows: (a) the letters patent and patent applications listed in Appendix A hereof; (b) all divisions, continuations or reissues of any of the foregoing patents and applications; (c) all patents issued upon such applications; (d) all patents which cover any titanium pigments or any process for the manufacture of titanium pigments issued to any of the defendants within five years from the date of this decree; and all such patents which any of the defendants acquires within such five years; and all such patents of which any of the defendants becomes the exclusive licensee within such five years with power to sublicense.

"7. Each of the defendants is ordered to grant to any applicant therefor, including any defendant or

co-conspirator; a non-exclusive license under any or all of the patents as herein defined at a uniform, reasonable royalty. Such grant may, at the option of the licensor, be conditioned upon the reciprocal grant of a license by the applicant, at a reasonable royalty, under any and all patents covering titanium pigments or their manufacture, now issued or pending, or issued within five years from the date of this decree, if any, owned or controlled by such applicant. Such license or reciprocal license may, at the option of either party, contain a provision for the inspection of the books and records of the licensee by an independent auditor who shall report to the licensor only the amount of royalty due and payable and no other information. During a period of three years from the date of this decree such license or reciprocal license may at the option of either party contain a provision for the imparting in writing, at a reasonable charge, by the licensor to the licensee, of the methods and processes used by the former at the date of the license in its commercial practice under the licensed patents in connection with the production of titanium pigments. The Court reserves jurisdiction to pass upon the reasonableness of any royalty or charge herein directed to be reasonable. Defendants are restrained from attempting to enforce any rights under any foreign patents owned by them or under which they are the exclusive licensees to prevent the exportation of titanium pigments from the United States to any foreign country."

The assignment of error originally made by the Government, in No. 89, as to this point was as follows:

"1. The court erred in failing to require each defendant to license its existing titanium pigment patents free of royalty until the court shall have determined, on application by any defendant, that the

effects of the defendants' illegal combination, as set forth in the court's findings of fact and conclusions of law, have been fully dissipated."

Later the Government moved to amend this assignment of error so that it would read as follows:

"The court erred in failing to enter an injunction perpetually enjoining the defendants from enforcing the titanium patents presently owned or controlled by them."

This Court postponed consideration of the above motion to the hearing of the case on its merits. On oral argument, the Government supported its second proposal but indicated that, if that proposal were not satisfactory, it would prefer its original request to the provision for uniform, reasonable royalties now in the decree. The Government's motion to amend its assignment of errors accordingly is granted. National Lead, in its assignments of error in No. 90, however, assigns the orders contained in paragraph 7 of the decree on this subject as error and, in its briefs, argues that "The court erred in refusing to order royalty-free licensing of all patents as defined in the judgment." Accordingly, both proposals have been considered.

While it has been contended that, because of the decision of this Court in *Hartford-Empire Co. v. United States*, 323 U. S. 386, the District Court was not free in the present case to require the issuance of royalty-free licenses, we feel that, without reaching the question whether royalty-free licensing or a perpetual injunction against the enforcement of a patent is permissible as a matter of law in any case, the present decree represents an exercise of sound judicial discretion.

This is a civil, not a criminal, proceeding. The purpose of the decree, therefore, is effective and fair enforcement, not punishment. An understanding of the findings of

fact is essential to an appreciation of the reasons for the decree.

Pure titanium pigment and its compounds represent a product of comparatively recent development but of major commercial value. The District Court found that—

"Titanium pigments are possessed of great opacity, hiding power and chemical inertness, and are largely displacing other pigments such as lithopone and white lead. Titanium pigments are used in the manufacture of paints and are also used in the manufacture of rubber, glass, paper, vitreous enamels, and many other products. . . .

"In and before 1920 there was no substantial trade or commerce in, and no commercial manufacture of, titanium pigments for use in paint, paper, rubber, or other products;" Finding of Fact 33.

"The production of titanium pigments in the United States has risen from 100 tons (on the basis of pure TiO_2 content) in 1920 to approximately 110,000 tons in 1943 with a peak production of approximately 128,000 tons in the United States in 1941. The total production of titanium pigments and compounds outside of the United States has shown less growth, the estimated foreign production of titanium pigments and compounds being approximately 1,000 tons in 1920 and approximately 23,000 tons in 1938." Finding of Fact 35.

There are four producers of titanium products in the United States—National Lead, du Pont, American Zirconium (here called Zirconium), which is a subsidiary of Glidden Company, and Virginia Chemical Company (here called Virginia Chemical), which is a subsidiary of American Cyanamid Company. National Lead and du Pont have cross-licensed each other under their respective patents. Zirconium entered the field in 1935 with licenses

from National Lead and du Pont, but the National Lead license has been canceled. Virginia Chemical entered the field in 1937 with a license from du Pont. Finding of Fact 42.

National Lead has assets of over \$100,000,000 and is the largest manufacturer of titanium pigments and compounds not only in the United States but in the world. In 1943 it manufactured and sold 76.5% of composite pigments and 46.4% of pure TiO_2 made in the United States. Finding of Fact 3. Du Pont is one of the largest chemical companies in the United States with assets of over \$1,000,000,000. It is one of the largest manufacturers of titanium pigments in the United States. In 1943 it manufactured and sold approximately 23.5% of the composite pigments and 45.1% of pure TiO_2 made in the United States. Finding of Fact 9.

National Lead took an early lead in promoting the commercial manufacture and use of titanium pigments. In 1920 it acquired an interest in The Titanium Pigment Company, Inc., which had been organized by the Titanium Alloy Manufacturing Company at Niagara Falls, New York. It made use of a patented process developed by Barton and Rossi. At about that time, a Norwegian chemist, Gustav Jebsen, made similar investigations but along different lines in Norway. He and his associates perfected a patented means for producing relatively pure titanium dioxide by a process much less costly than that in use at Niagara Falls. These associates had not, however, perfected processes for the manufacture of composite pigments. Finding of Fact 33. In about 1922, Joseph Blumenfeld, a chemist and managing director of a French company, obtained patents relating to the manufacture of titanium compounds. Finding of Fact 34.

On July 30, 1920, The Titanium Pigment Company, Inc., (affiliated with National Lead) and Titan Co. A/S

(representing the Jebesen interests) entered into an agreement which is still uncanceled. Its principles became the basis for more than 60 subsequent agreements and for an international cartel in titanium pigments. The essential features of this agreement are stated in Finding of Fact 44 and in the opinion of the District Court, 63 F. Supp. at 517-518.

Briefly stated, it applied to a licensed field, defined as including all substances containing above 2% of titanium unless containing by weight more than 5% of a metal other than titanium in its purely metallic form. It applied to all apparatus, methods and processes useful in obtaining or manufacturing such substances both in the titanium and in the titanium compound field.

Both parties agreed to grant and accept a license, exclusive of all others including the licensor, under all "existing or future" patents of the licensing party. They

"Cartels have been defined by two of the foremost members and advocates of such bodies. In the words of Sir Alfred Mond, organizer of Imperial Chemical Industries:

"I use the word cartel to include fusion, pooling arrangement, quota arrangement and price convention, because a cartel is protean in its form. . . . In an ultratechnical way, a cartel might be defined as a combination of producers for the purpose of regulating, as a rule, production, and, frequently, prices. . . ."

"In the words of Sir Felix J. C. Pole, chairman of Associated Electrical Industries, Ltd.:

"A cartel or association usually means an association by agreement of companies or sections of companies having common interests. It is designed to prevent extreme or unfair competition and allocate markets, and it may also extend to interchange of knowledge resulting from scientific and technical research, exchange of patent rights, standardization of products, etc. Competition is not eliminated, but it is regulated. Competition in quality, efficiency, and service takes the place of the crude method of price cutting." Monograph No. 1, Subcommittee on War Mobilization of the Committee on Military Affairs, U. S. Senate, 78th Cong., 2d Sess., Part I, p. 1. Quoted also in *United States v. National Lead Co.*, 63 F. Supp. 513, 523, note 5.

divided the globe territorially. The American company was to have the North American continent. The Norwegian company was to have the rest of the world, except that reciprocal, nonexclusive rights of sale were reserved for both companies in South America.

Detailed provision was made for exchange of copies of applications for patents filed by the parties or their other licensees. Neither party was ever to question or contest the validity of any patent of the other under which it was licensed within the field described.

The American company became the exclusive agent for the Norwegian company in North America and vice versa outside of North and South America. Sales were to be at prices and on terms determined by the agent. Notwithstanding these agencies, however, importations of "finished articles"—that is, paint, paper, rubber, glass, etc.—containing titanium products of the principal, its licensees or sublicensees, would be permitted provided such products did not constitute such an important part of such finished articles that sales within the agent's territory would interfere substantially with the agent's sales of its own titanium products.

Each party would impart semiannually to the other information in detail as to knowledge obtained in and applicable to the "licensed field," and would permit the other to inspect and study operations in its plants (exclusive of research laboratories). The reciprocal grants of exclusive licenses would extend to December 31, 1936, and thereafter for periods of ten years each, with provision for termination by notice to be given at least five years before the end of any such period. In particular, so long as each company held an exclusive license from the other under this agreement, it would have the right to grant licenses under its own patents, and sublicenses under the other's patents, on the condition, nevertheless,

that every such licensee or sublicensee would grant to the party to the 1920 agreement (other than its licensor), its patent rights in the "licensed field" identical in character, territorial scope, and duration to those given by its licensor to such other party under the 1920 agreement, and would impart technical information to such other party in the same manner and to the same extent as its licensor.

In 1929, the obligations of Titan Co. A/S under this agreement were assumed by Titan Inc. and, in 1936, the obligations of The Titanium Pigment Company, Inc., were assumed by National Lead.

Other companies throughout the world joined in carrying out this program to restrain international commerce and to establish an international combination or conspiracy in restraint of trade. The complaint in the present case lists many of these foreign companies as co-conspirators with National Lead, Titan Inc. and du Pont, but it does not attempt to make such co-conspirators parties defendant. The District Court recognized that it did not have jurisdiction over such co-conspirators and found in that circumstance one of its difficulties in effectively restraining National Lead, Titan Inc. and du Pont from further violations of the Sherman Antitrust Act, pursuant to this international as well as domestic program. To accomplish this purpose, the District Court has adjudged these agreements to be unlawful and it has canceled them. In addition, it has enjoined all three defendants, National Lead, Titan Inc. and du Pont, from further performance of any of the provisions of such agreements and of any agreements amendatory thereof or supplemental thereto. Pars. 5 and 6 of the decree, 63 F. Supp. at 533-534.

National Lead acquired an 87% interest in Titan Co. A/S, Jebesen retaining 13%. The District Court found that "The intended purpose of the acquisition of control

of TAS by NL was to utilize TAS and the contract of 1920 to further control competition in the manufacture of titanium pigments and compounds in all markets of the world including the United States." Finding of Fact 47.^a While this combination and conspiracy in restraint of interstate and foreign commerce thus was developing from 1920 to 1931, with National Lead and Titan Inc. at its center, du Pont was unconnected with it. Du Pont had initiated independent, but unsuccessful, efforts to develop, through research, a new and patentable commercially feasible process in this field. It became convinced that if it were to undertake the manufacture and sale of titanium pigments as a development of its white pigment business, it would be necessary to enter the field as

^a "This purpose was accomplished. The defendant NL and TAS agreed to have TAS and subsequently defendant Tinc form in each of the important industrial countries of the world, in association with a local corporation or firm which contemplated the manufacture and sale of titanium pigments and compounds or which could contribute to the technical or commercial development or which threatened to be a serious competitor of NL and TAS, a new company in which NL or TAS were to have a part interest. Any new company so formed was to be given certain territory in which it would have the exclusive right to manufacture and sell titanium pigments and compounds free from any exports into said territory by NL. The new company so organized was to refrain from competing with NL in its territory (the United States and other countries of North America) or in the territory of any other company associated with NL. TAS and subsequently defendant Tinc were to make said contracts providing for the formation of the new companies and NL was to be bound to adhere to all of the territorial restrictions placed on TAS and subsequently defendant Tinc in such contracts by virtue of contract Exhibit A. [The agreement of July 30, 1920.] All the present and future patents belonging to NL or TAS or any of the companies associated with either in the formation of such new companies, as well as those of the new companies to be organized, were to be licensed exclusively to NL for North America and to the new companies to be organized for their respective exclusive territories and to TAS and subsequently defendant Tinc for the rest of the world." Finding of Fact 48.

promptly as possible through the acquisition of the patents and of the going business of Commercial Pigments Company. That company had been formed by Commercial Solvents Corporation in 1928 and had acquired the Blumenfeld and other patents in the United States relating to the manufacture and sale of titanium pigments and compounds. It was operating a plant in Baltimore, Maryland, where it manufactured pure TiO_2 pigment only and sold it in competition with the The Titanium Pigment Company, Inc. (the affiliate of National Lead). In July, 1931, du Pont, through its subsidiary, Krebs Pigment & Color Corporation, acquired all of the assets and assumed some of the obligations of Commercial Pigments Company. It thus continued and, in fact, increased its competition in the titanium pigment field against National Lead.. Findings of Fact 70, 12, 10 and 71.

"Both NL and DP in good faith claimed that each infringed certain of the other's titanium pigment patents and both in good faith denied such infringement claiming, among other things, that the patents alleged to be infringed were of doubtful validity. NL and DP agreed in October, 1932, that the validity of the patents claimed to be infringed should not be questioned except as a last resort and that they should try to arrive at a general understanding." Finding of Fact 72.

Finally, in 1933, The Titanium Pigment Company, Inc. (by that time a 100% subsidiary of National Lead), and Krebs Pigment & Color Corporation (subsidiary of du Pont) were the only producers of titanium pigments in the United States. The 1920 agreement, however, prevented The Titanium Pigment Company, Inc. (National Lead), from entering into a contract with Krebs Pigment & Color Corporation (du Pont) unless the latter subscribed to the provisions of the 1920 agreement. Such a

subscription would have required an agreement by Krebs (du Pont) not to export into the territories of National Lead's foreign associates, and an agreement to grant to National Lead's foreign associates exclusive licenses under all of Krebs' (du Pont's) present and future patents for titanium pigments and compounds in the territories of the foreign associates. Finding of Fact 73. After extensive negotiations, National Lead and du Pont formulated an agreement in writing, dated as of January 1, 1933, which was executed August 28, 1933. It is summarized in Finding of Fact 73 and in the opinion of the lower court, 63 F. Supp. at 520-521. By its terms, it provided for cross-licensing but did not provide for the exclusive licensing and restrictive territorial and agency agreements specified in the 1920 program. Certain foreign associates of National Lead, particularly Interessengemeinschaft Farbenindustrie Aktiengesellschaft (usually referred to as I. G. Farbenindustrie), insisted upon some such commitment from du Pont or its subsidiary. This insistence never was abandoned. After further negotiations and an exchange of letters, all as set forth in full in Finding of Fact 73 and in the opinion of the District Court, 63 F. Supp. at 528-529, some understanding was reached as to the future conduct of du Pont, or of its subsidiary. On the strength of this, I. G. Farbenindustrie agreed to the situation. On the basis of all the evidence, the District Court found that—

"DP, through Rupprecht [President of Krebs Pigment & Color Corporation] and Krebs [the corporation], by these assurances and Exhibit E [the agreement dated as of January 1, 1933], joined the conspiracy found herein to exist between NL and its foreign associates. DP's status rights and obligations were different from those of the other members of the combination. DP did not thereafter withdraw." Finding of Fact 73.

That finding, which we accept, throws important light upon the conditions to which the decree is to be applied. Furthermore, although National Lead and du Pont exchanged technical information relating to the manufacturing or use of titanium pigments or compounds from about April, 1932, until April, 1940, this exchange was discontinued May 1, 1940. The agreement of 1933 between The Titanium Pigment Company, Inc., and Krebs Pigment & Color Corporation which then had been assumed by National Lead and du Pont, respectively, was amended on January 1, 1941, to eliminate provisions for the exchange of technical information. Finding of Fact 75. It was further amended to include extender pigments, which theretofore had been included by implication and practice. Finding of Fact 76. After January 1, 1941, patent applications were to be available between National Lead and du Pont only after six months from the date of their filing, instead of immediately. Finding of Fact 77.

"From 1933 on there was active competition between NL and DP for customers. There has been a vast increase in sales; and repeated reductions in the price of titanium pigments have taken place and a very few increases. DP entered the titanium pigment business in 1931 and since that date it has made frequent plant expansions for the manufacture of pure and composite TiO_2 and its production increased from 20,027 tons in 1935 to 50,674 tons in 1941 and then decreased to 42,843 tons in 1943.

"NL and DP have endeavored to match each other's titanium products; but each also manufactures certain titanium pigments having special applications not manufactured by the other.

"There is no allocation of territory or customers between NL and DP; and each maintains a large, highly trained technical sales force engaged in en-

endeavoring to sell titanium pigments. To a very large extent the salesmen of the two companies are chemists whose contact with consumers (that is, manufacturers of paint, rubber, glass, etc.) consists in endeavoring to demonstrate that their products merit acceptance on the basis of technical superiority. The buyers of titanium pigments are mainly well-informed, experienced purchasing agents. NL and DP sell for identical prices; there is no evidence that such price identity is the product of agreement or collusion." Finding of Fact 78.

These findings disclose the special conditions which confronted the District Court in framing its decree. They disclose a vigorous, comparatively young, but comparatively large, world-wide industry in which two great companies, National Lead and du Pont, now control approximately 90% of the domestic production in substantially equal shares. The balance of that production is in the hands of two smaller companies. Each of these is affiliated with larger organizations, not parties to this case. The findings show vigorous and apparently profitable competition on the part of each of the four producers, including an intimation that the smaller companies are gaining ground rather than losing it. Keen competition has existed both before and after the elimination, by the 1933 agreement and understanding, of certain patent advantages from among the weapons of competition. The competition between National Lead and du Pont has been carried into this Court where today National Lead supports the Government's proposal for royalty-free licenses, while du Pont argues strongly for a complete dismissal of the proceedings and contends that, in any event, if there are to be compulsory licenses they at least should require payment of uniform, reasonable royalties as provided in the present decree.

Assuming, as is justified, that violation of the Sherman Act in this case has consisted primarily of the misuse of

patent rights placing restraint upon interstate and foreign commerce, that conduct is not before this Court for punishment. It is brought before this Court in order to secure an order for its immediate discontinuance and for its future prevention. That will be accomplished largely through the strict prohibition of further performance of the provisions of the unlawful agreements. Further assurance against continued illegal restraints upon interstate and foreign commerce through misuse of these patent rights is provided through the compulsory granting to any applicant therefor of licenses at uniform, reasonable royalties under any or all patents defined in the decree. Such patents include not only the patents and patent applications listed in the appendix to the decree, but also, among others, all patents which cover any titanium pigments or any process for the manufacture of such pigments issued to, or acquired by, any of the appellant companies within five years from the date of the decree. It applies also to all such patents of which any of the appellant companies shall become the exclusive licensee within such five years with power to sublicense.

On the facts before us, neither the issuance of such licenses on a royalty-free basis nor the issuance of a permanent injunction prohibiting the patentees and licensees from enforcing those patents has been shown to be necessary in order to enforce effectively the Antitrust Act. We do not, in this case, face the issue of the constitutionality of such an order. That issue would arise only in a case where the order would be more necessary and appropriate to the enforcement of the Antitrust Act than here. In the absence of a showing to the contrary, it is obvious that some patents should entitle their owners to receive higher royalties than others. Also, it is clear that several patents, each of equal value, ordinarily should entitle their owners to a larger total return in

royalties than would one of them alone. It follows that to reduce all royalties automatically to a total of zero, regardless of their nature and regardless of their number, appears, on its face, to be inequitable without special proof to support such a conclusion. On the other hand, it may well be that uniform, reasonable royalties computed on some patents will be found to be but nominal in value. Such royalties might be set at zero or at a nominal rate. The conclusion, however, would depend on the facts of each case.

Recognizing the difficulty of computing a reasonable royalty,⁷ nevertheless, that conception is one that already has been recognized both by Congress and by this Court.⁸

⁷ *Hearings before Committee on Patents on H. R. 23,417*, 62d Cong., 2d Sess. (1912), Part XII, pp. 10-11; H. R. Rep. 1161, 62d Cong., 2d Sess. (1912), Part 2, p. 8; Report of Subcommittee of the American Bar Association appointed to consider the King Bill, S. 383, 74th Cong. (1925), p. 38.

⁸ A recent recognition of a reasonable royalty test is contained in Chapter 726 of the 29th Congress, 2d Session:

"... upon a judgment being rendered in any case for an infringement the complainant shall be entitled to recover general damages which shall be due compensation for making, using, or selling the invention, *not less than a reasonable royalty therefor*, together with such costs, and interest, as may be fixed by the court. . . ." (Italics supplied.) R. S. § 4921, as amended August 1, 1946, 60 Stat. 778, 35 U. S. C. A. § 70 (Supp. 1946); relating to the power of courts to grant injunctions and estimate damages.

The most recent and outstanding example of its recognition is in *Hartford-Empire Co. v. United States*, 323 U. S. 386, 413-417.

In patent accounting suits, where the profits or damages cannot be ascertained and no standard of comparison is available, the court may allow a reasonable royalty.

"But, as the patent had been kept a close monopoly, there was no established royalty. In that situation it was permissible to show the value by proving what would have been a reasonable royalty, considering the nature of the invention, its utility and advantages, and the extent of the use involved. Not improbably such proof was more difficult to produce, but it was quite as admissible as that of

The term frequently has been employed in Sherman Anti-trust case consent decrees.* In the present case, the royalties charged to and paid by Zirconium and Virginia Chemical provide enough guidance to indicate that the reasonableness of future royalties may be determined in this case with less difficulty than often might confront a court faced with such a task. Cf. *Sinclair Refining Co. v. Jenkins Petroleum Process Co.*, 289 U. S. 689, 697-698. The growing strength of those two royalty-paying licensees has demonstrated that royalty-free licenses have not been essential to such progress even under past conditions. Finally, the District Court, under paragraphs 7 and 13 of the decree, will retain sufficient jurisdiction to enable it to vacate or modify its orders fixing reasonable royalty rates if it finds such action to be necessary or appropriate. We hold, therefore, that paragraphs 4 and 7 of the decree should not be modified either so as to provide for compulsory royalty-free licenses or so as to enjoin the patentees or licensees from enforcing the terms of the patents involved.

B. Request to add a provision requiring National Lead and du Pont each to submit, within a year, a plan for the divestiture by it of one of its two principal titanium

an established royalty." *Dowagiac Mfg. Co. v. Minnesota Plow Co.*, 235 U. S. 641, 648.

See also, *Sheldon v. Metro-Goldwyn Corp.*, 309 U. S. 390, 404; *Suffolk Co. v. Hayden*, 3 Wall. 315, 320; 3 Walker on Patents § 833 (Deller's ed. 1937) (*Id.* 1945 pocket supp.); 56 Yale L. J. 77.

* *United States v. Owens-Ill. Glass Co.*, CCH Trade Reg. Serv. ¶ 57,498 (D. C. N. D. Calif. 1946); *United States v. American Air Filter Co.*, CCH Trade Reg. Serv. ¶ 57,492 (D. C. W. D. Ky. 1946); *United States v. Libbey-Owens-Ford Glass Co.*, CCH Trade Reg. Serv. ¶ 57,489 (D. C. N. D. Ohio 1946); *United States v. Diamond Match Co.*, CCH Trade Reg. Serv. ¶ 57,456 (D. C. S. D. N. Y. 1946); *United States v. General Elec. Co.*, CCH Trade Reg. Serv. ¶ 57,448 (D. C. N. J. 1946); *United States v. Bendix Aviation Corp.*, CCH Trade Reg. Serv. ¶ 57,444 (D. C. N. J. 1946); *Crosby Steam Gage & Valve Co. v. Manning, Maxwell & Moore*, CCH Trade Reg. Serv. ¶ 57,336 (D. C. Mass. 1945).

pigment plants, together with the related physical property. This request is urged by the Government in No. 89. It is strongly opposed both by National Lead and du Pont. The issue was discussed at length by the parties and the District Court in the reported conferences as to the form of the decree.

We believe there is neither precedent nor good reason for such a requirement. The violation of the Sherman Act is found in these cases in the patent pooling and in the related agreements restraining interstate and foreign commerce. There is neither allegation in the complaint nor finding of fact by the District Court that the physical properties of either National Lead or du Pont have been acquired or used in a manner violative of the Sherman Act, except as such acquisition or use may have been incidental or related to the agreements above mentioned. The cancellation of such agreements and the injunction against the performance of them by the appellant companies eliminate them. Paragraph 8 of the decree goes further. It requires National Lead and its subsidiary, Titan Inc., to present, within one year, a plan for divesting themselves of their stockholdings and other financial interests in certain foreign corporations, or for the purchase of the entire stockholdings and other financial interests, direct or indirect, in such corporations or any of them. Such a plan, which was required also to provide for its completion within two years from the date of the decree, will go as far toward divestiture as the findings of fact indicate should be necessary to make the decree effective.

There is no finding of fact, and apparently no evidence, showing that the respective principal titanium plants of National Lead or du Pont were acquired in violation of law, that they ever were separately owned or operated, or that they are adapted to such operation. Presumably, the requested divestiture would be for the purpose of providing four instead of two independent major competing

plants in the titanium pigment industry. However, there is no showing whether or not the two licensees, Zirconium (subsidiary of Glidden Company) and Virginia Chemical (subsidiary of American Cyanamid Company), may not be able to develop, under the decree, even more substantial competition against National Lead and du Pont than would new concerns operating the divested plants. No comparable precedents have been presented. Existing precedents of divestiture provide examples of the restoration of a pre-existing separate status to companies or properties which have been unlawfully combined rather than to the fission of units which never have been separated. *United States v. Crescent Amusement Co.*, 323 U. S. 173, 189; *Standard Oil Co. v. United States*, 221 U. S. 1, 77-82. Cf. *Northern Securities Co. v. United States*, 193 U. S. 197, 354-360.

There is no showing that four major competing units would be preferable to two, or, including Zirconium and Virginia Chemical, that six would be better than four. Likewise, there is no showing of the necessity for this divestiture of plants or of its practicality and fairness. The findings of fact have shown vigorous and effective competition between National Lead and du Pont in this field. The general manager of the pigments department of du Pont characterized the competition with Zirconium and Virginia Chemical as "tough" and that with National Lead as "plenty tough." Such competition suggests that the District Court would do well to remove unlawful handicaps from it but demonstrates no sufficient basis for weakening its force by divesting each of the two largest competitors of one of its principal plants. It is not for the courts to realign and redirect effective and lawful competition where it already exists and needs only to be released from restraints that violate the antitrust laws. To separate the operating units of going concerns without more supporting evidence than has been pre-

sented here to establish either the need for, or the feasibility of, such separation would amount to an abuse of discretion.

C. Request to add a provision requiring National Lead and du Pont to furnish to any applicant, at a reasonable charge, during a period of three years, technical information desired by the applicant relating to the methods and processes for manufacturing titanium pigments. This would supersede the provision now in the decree which, during a period of three years, makes available to a licensee certain information in writing, at a reasonable charge, as to the methods and processes used by his licensor at the date of the license. This is urged by the Government in No. 89 and opposed by National Lead and du Pont. Du Pont, in No. 91, goes further and urges the omission of all requirements compelling it to furnish technical information.

The request by du Pont to eliminate this requirement altogether is based, in part, upon the experience of the appellant companies. Du Pont emphasizes the fact that the titanium pigment industry has matured and that, since about May 1, 1940, the exchange of technical information between National Lead and du Pont has ceased. Also, the agreement between them which called for the exchange of technical information was amended January 1, 1941, to eliminate the provisions requiring such exchange. Finding of Fact 75. Du Pont argues that neither Zirconium, which entered the industry in 1934, nor Virginia Chemical, which entered the industry in 1935, ever exchanged technical information with du Pont or received any from du Pont. However, Finding of Fact 84 shows that, as to National Lead in 1935—

" . . . NL and Zirconium cross licensed each other under all patents in the titanium pigment field, then owned or thereafter acquired, and both parties

agreed to exchange technical information and experience. . . .

"NL did render some engineering assistance to Zirconium in connection with the installation and use of its processes and imparted some technical information but frequently it refused to convey such technology to Zirconium on the ground that it was prevented by other agreements from so doing.

"On occasions before 1940 there was exchange of information between DP and NL relative to Zirconium's production."

Virginia Chemical was not licensed under National Lead's patents and apparently did not receive technical information from National Lead.

Finding of Fact 95, subparagraph 8, contains a further material finding, although this is disputed by du Pont:

"The defendants NL and DP secured a monopoly on technical information relating to the manufacture and use of titanium pigments and certain apparatus and equipment necessary to the manufacture of certain titanium pigments to the exclusion and detriment of other producers now engaged in the titanium pigment business in the United States; when NL and DP ceased exchanging technical information, the titanium pigment business was a mature industry."

The requirement for the exchange of technical knowledge under the present decree is merely that included in paragraph 7, which is as follows:

"During a period of three years from the date of this decree such license or reciprocal license may at the option of either party contain a provision for the imparting in writing at a reasonable charge, by the

licensor to the licensee, of the methods and processes used by the former at the date of the license in its commercial practice under the licensed patents in connection with the production of titanium pigments."

The limited scope of this access to technical information is apparent. On the other hand, there is reason to believe that the knowledge which thus can be secured may be vital in giving value to the compulsory licenses which are a central feature of the decree. The information is put upon a basis comparable to that of a license. Just as a licensee is required to pay a uniform, reasonable royalty for the privilege of operating under the patent, so, also, he is required to pay a reasonable charge for the information as to methods and processes which may be important to him in his commercial practice under the licensed patents.

The need for technical information to accompany patent licenses in this field, at least where desired by a newcomer, is testified to repeatedly. If there be such a need, the reasonableness of this limited availability of it as stated in the decree is hard to deny. Findings of fact evidencing the importance of such information include the following:

"NL wished to pool with DP all their patents and technical information relating to the manufacture or use of titanium pigments in the United States in order to settle its patent controversies with DP and to obtain access to DP's patents and technical facilities and jointly to control and dominate the manufacture and sale of titanium pigments and compounds; . . . Both TP and Krebs began to exchange extensively technical information relating to the manufacture and use of titanium pigments in 1932 and the information so exchanged related to much more than any alleged claims of patent in-

fringement by either company. Bludenberg and his foreign associates furnished technical aid and assistance to Krebs at its instance from August 1931 until the approximate date at which TP and Krebs commenced the exchange of technical information in 1932." Finding of Fact 72.

"DP and NL exchanged technical information relating in any manner to the manufacturing or use of titanium pigments or compounds from about April, 1932, until April, 1940." Finding of Fact 75.

"In entering into the agreement, Ex. E [the agreement of July 1, 1933], NL had several purposes:

1) For about a year prior to the making of Ex. E, officials of NL had been concerned by the early expiration dates of many of the patents upon which NL relied. By exchanging patents and technology with DP, a large and powerful corporation, possessed of great research facilities, NL expected to strengthen the patent monopoly of NL and DP jointly, as against newcomers in the titanium pigment business.

"DP's purpose in entering into the agreement Ex. E were:

3) To obtain access to NL's technical experience and patents in the titanium pigment field as well as the patents and the experience of NL's foreign associates.

"The necessary effects of the agreement Ex. E and of DP assurances have been

1) The achievement of NL purposes.

2) The achievement of DP's purposes.

3) To give NL and DP together domination and control over the titanium pigment business in the U.S." Finding of Fact 79.

National Lead on this point now takes a middle ground. Apparently it supports the present provision in the decree and opposes its expansion as proposed by the Government. It expressly endorses the present provisions if the decree is amended so as to put the compulsory licenses on a royalty-free basis. If it approves this grant of access to technical information on that basis, it hardly can object to it in connection with licenses on a uniform, reasonable royalty basis.

The fact that this Court eliminated, without discussion, paragraph 24 (c) from the *Hartford-Empire* decree is not controlling here. *Hartford-Empire Co. v. United States*, *supra*, 413, 418. The fact that the violations of the Anti-trust Act may have been more reprehensible in that case than here is not persuasive because this provision is not and should not be punitive. The justification for the compulsory imparting of methods and processes rests upon its appropriateness and upon the necessity for it in providing an effective decree. In the *Hartford-Empire* decree, paragraph 24 (c) proposed to make available to any licensee under paragraph 24 (a) (without royalties), or under paragraph 24 (b) (with reasonable royalties), at cost, plus a reasonable profit, "all drawings and patterns relating to the machinery or methods used in the manufacture of glassware embodied in the licensed inventions" *Id.* at 413-414. This Court, in that case, modified paragraphs 24 (a) and 24 (b) and deleted paragraph 24 (c). In the absence of a statement of this Court's reasons for the deletion of paragraph 24 (c), it cannot be assumed that, by such deletion, it announced its disapproval, in all future decrees, of provisions requiring the supplying of technical information to licensees at a reasonable charge.

It may well be that the District Court, in the present case, took into consideration the argument made by National Lead that, in this field, "The product claims cover practically all such improved titanium pigments" thus,

of 23 different grades of titanium pigments (*i. e.* different products) sold by NL, 21 are covered by unexpired patents." Finding of Fact 37. Therefore, the imparting to the newcomer of methods and processes covered by the decree might be particularly important to him in entering this industry where substantially all the commercial products are covered either by process or product patents.

Du Pont has presented a strong case against compelling it to make further disclosure of its technical information to its leading competitor, National Lead, in this comparatively mature technical industry, especially since the agreement of 1941 between these companies expressly terminated their pre-existing agreement to supply such information. This argument does not apply, however, with comparable force, to the many other situations toward which this provision is directed. Under all the circumstances, and in view of the narrow limits written into the provision by the District Court, we believe that it represents a permissible exercise of judicial discretion. It is to be judged from the point of view of the public interest as well as that of the private interests concerned. That public interest requires that the court be permitted to produce the most effective and generally fair decree that it can devise to give effect simultaneously to the antitrust laws and the patent laws.

This decision relies also on the permissible breadth of the District Court's discretion over the conditions under which technical information shall be required to be shared with the world. The attempt of the Government to throw the field of technical knowledge in the titanium pigment industry wide-open would reduce the competitive value of the independent research of the parties. It would discourage rather than encourage competitive research. It would be contrary to, rather than in conformity with, the policy of the patent laws now in force.

Changes in the underlying policies of the patent laws frequently have been presented to Congress, but Congress, by its failure to accept those changes, has added to, rather than detracted from, the strength of the present and traditional patent policies.

D. Request to omit the provision that National Lead and du Pont, respectively, may make the grant of any license by either of them to an applicant under the decree, conditioned upon the reciprocal grant of a license by the applicant at a reasonable royalty, under certain described patents owned or controlled by such applicant. This is urged by the Government in No. 89 and opposed by the appellant companies.

The District Court, during the conferences on the terms of the decree, summarized the need for this provision by a concrete illustration of what it suggested might happen without it. It said:

"Otherwise you will arrive at a situation conceivably where Virginia Chemical would simply change places with du Pont in becoming the dominating factor in the industry under this extraordinary advantage of being able to take everything for itself and keeping everything that it has."

The District Court distinguished the present case from the *Hartford-Empire* case by showing that, in the latter, there had not been a similar reason for inserting the reciprocal requirement. In that case, the court was dealing with a licensor organization which had no use for patents except for the resulting control over licensing and, consequently, it would have derived no benefit from cross-

¹⁰ H. R. 20,388, 60th Cong., 1st Sess. (1908); H. R. 11,796, 61st Cong., 1st Sess. (1909); H. R. 2930, 62d Cong., 1st Sess. (1911); H. R. 16,828, 62d Cong., 2d Sess. (1912); H. R. 23,417, as amended, 62d Cong., 2d Sess. (1912); H. R. 1700, 63d Cong., 1st Sess. (1913); H. R. 14,865, 63d Cong., 2d Sess. (1914); S. 2783, 70th Cong., 1st Sess. (1928); S. 2491, 77th Cong., 2d Sess. (1942).

licenses. The reciprocal clause includes an appropriate reference to future patents. As a five-year limit is put on the patents which will be subject to the compulsory license clause, under paragraphs 4 and 7 of the decree, so also the reciprocal licenses are limited by paragraph 7 to "patents covering titanium pigments or their manufacture, now issued or pending or issued within five years from the date of this decree. . . ."

Here again, the provision is well within the discretion of the District Court in seeking means to fit the relief it grants to the needs of the particular case, always with due regard to the underlying public interest that is inherent in the antitrust and patent laws.¹¹

E. Request to omit the six-months' time limit imposed by the decree upon the options of American Zirconium Corporation and Virginia Chemical Corporation, respectively, to secure certain licenses under the decree. This is urged by the Government in No. 89. It is not discussed here in the briefs of the other parties. The effective date of the decree of October 11, 1945, was stayed and suspended, by the order of Mr. JUSTICE REED entered January 2, 1946, pending determination of the present appeals to this Court, so that more than six months already have passed since the original date of the decree without prejudicing the rights of the parties affected. In view of such suspension and of the new effective date to be given to the decree, pursuant to the order of this Court, there will be ample time for the exercise of this option under its terms.

F. Request to modify the language of the decree so as to eliminate language which, it is claimed, enjoins normal

¹¹ Provisions for reciprocal licensing have been incorporated in consent decrees. See *United States v. General Elec. Co.*, CCH Trade Reg. Serv. ¶ 52,777 (D. C. N. J. 1942); *United States v. American Bosch Corp.*, CCH Trade Reg. Serv. ¶ 52,888 (D. C. S. D. N. Y. 1942).

and usual business arrangements between the appellant companies and other producers of titanium products. This is urged by National Lead in No. 90 and is opposed by the Government. The precise request is to strike from paragraphs 5 and 6 of the decree certain language shown in the margin of this text in italics and to insert in paragraph 6 the word "producer" at the point there shown in capital letters.¹² National Lead contends that the cancellation of the agreements, as ordered in paragraph 5, and the injunction, as ordered in paragraphs 5 and 6, against

¹² "5. The following agreements are hereby adjudged to be unlawful under Section 1 of the Sherman Act and each of them is hereby cancelled *and the defendants and each of them and all persons acting or claiming to act through, for or under them and all successors and subsidiaries of any of the defendants are hereby enjoined, and restrained from the further performance of any of the provisions of said agreements and of any agreements amendatory thereof or supplemental thereto:* [followed by a list of the canceled agreements]"

"6. Each of the defendants and each of their directors, officers, agents, employees, successors and subsidiaries and all persons acting, or claiming to act under, through or for them or any of them are hereby enjoined and restrained (a) *from entering into, adhering to, maintaining or furthering, directly or indirectly, or claiming any rights under any contract, agreement, understanding, plan or program among themselves, the co-conspirators, or with any other person, partnership or corporation, which has as its purpose or effect the continuing or renewing of any of the agreements listed in paragraph 5 hereof;* (b) *from entering into, adhering to, maintaining or furthering, directly or indirectly, any contract, agreement, undertaking, plan or program with any other producer or dealer relating to titanium pigments which has as its purpose or effect (1) to divide sales or manufacturing territories, (2) to allocate markets, (3) to limit or prevent United States imports or exports, (4) to grant to any third party any market as its exclusive territory, (5) to keep any third party out of any market; provided, however, that nothing contained in this subdivision (b) of this paragraph 6 shall prohibit any normal and usual arrangements between any defendant and its directors, officers, employees, agents, subsidiaries, or any PRODUCER, dealer or distributor, whether or not a co-conspirator; (c) from restricting any purchaser of titanium pigments in the use thereof."*

the further performance or the continuation or renewal of the unlawful provisions thereof (namely, division of sales or manufacturing territory, allocation of markets, limitation of imports or exports, restrictions on use, etc.) will insure complete and effective relief without subjecting National Lead or du Pont to undue hardship and losses. Accordingly, National Lead states that it asks for the changes here indicated in the interest of promoting trade and competition in titanium pigments.

We agree, however, with the Government's interpretation that paragraph 5 deals solely with the future enforceability of existing contracts and that the deletion of the words requested by National Lead is not necessary in order to remove barriers to future contracts. Paragraph 6 deals with future contracts. Clause (a) enjoins the parties from entering into or adhering to any agreement, plan or program "which has as its purpose or effect the continuing or renewing of any of the agreements listed in paragraph 5" Since such agreements have been found to violate the Sherman Act, this provision imposes no unjustified restriction on National Lead's power to contract. We find also no sufficient basis for inserting the word "producer" as requested in paragraph 6. If National Lead later can demonstrate that its right of contract has been unduly restricted, it may, under the terms of the decree, apply to the District Court for a modification of the judgment.

G. Request to omit the requirement that National Lead and Titan Inc., within one year, shall present to the District Court, for its approval, a plan for divesting themselves of their stockholdings and other financial interests in certain foreign companies or for the purchase of the entire stockholdings and interests, direct or indirect, in such companies or any of them. To accomplish this, National Lead and Titan Inc., in No. 90, urge the deletion

of paragraph 8 from the decree.¹³ The Government opposes such deletion. The requirement imposed by paragraph 8 is merely that certain parties shall present to the District Court, within one year, a plan subject to its approval. That court, during the conferences on the terms of the decree, said: "In other words, the stock acquisitions were part and parcel of the territorial allocation agreements, and probably were a necessary element in the establishment of the territorial arrangement." We find ample reasons in the record for the action of the District Court in inserting paragraph 8 in the decree. It is related directly to the injunction against further performance of any of the provisions of the agreements listed in the decree as being in violation of the Sherman Act.

In thus disposing of the points relied upon in the respective appeals, the decree will remain as originally entered by the District Court, excepting only that, as a result of the dissolution of the stay and suspension of certain provisions of the decree contained in paragraphs 5, 8, 9, 10 and 11 thereof, which were granted pending determination of these appeals to this Court, the decree shall be deemed, for the purposes of those paragraphs and for the running of time thereunder, to take effect on the effective date of the mandate to be issued by this Court.

For the reasons set forth, the motion of the United States to amend its assignments of error is granted and the judgment of the District Court is

Affirmed.

MR. JUSTICE BLACK and MR. JUSTICE JACKSON took no part in the consideration or decision of these cases.

¹³ For paragraph 8, see note 4, *supra*.

SUPREME COURT OF THE UNITED STATES

Nos. 89, 90, 91.—OCTOBER TERM, 1946.

The United States of America,
Appellant,

89

v.

National Lead Company, Titan Company, Inc., and E. I. du Pont de Nemours and Company.

National Lead Company, and Titan Company, Inc., Appellants,

90

v.

The United States of America.

E. I. du Pont de Nemours and Company, Appellant,

91

v.

The United States of America.

On Appeals from
the District
Court of the
United States
for the South-
ern District of
New York.

[June 23, 1947.]

MR. JUSTICE DOUGLAS, with whom MR. JUSTICE MURPHY and MR. JUSTICE RUTLEDGE concur, dissenting in part.

I cannot agree that royalties should be charged on patents whose misuse has been so flagrant as to persuade us to approve compulsory licensing of all who desire to use the inventions. Nor do I think that the failure to provide for royalty free licensing may be sustained as an exercise of the judicial discretion of the District Court. That would be the case if the District Court had been free to frame its decree unembarrassed by the ruling in *Hartford-Empire Co. v. United States*, 323 U. S. 386, 324 U. S. 570. In that case this Court modified an anti-trust decree so as to permit "reasonable" royalties on patents which had been ordered licensed without charge to all applicants. The language there used well might

lead a court to the conclusion that royalty-free licensing is a remedy unacceptable as a matter of law.¹ In these circumstances it is fair to assume that the action of the district judge in the present case was in deference to the *Hartford-Empire* rule rather than a reflection of his own judgment.²

The *Hartford-Empire* case presented the first instance, so far as I am aware, of the incorporation of a royalty free licensing provision in an antitrust decree. Since the question is one of the greatest importance in the administration of the antitrust laws, and was not considered by the full Court,³ I think it remains an open one, except as applied to the *Hartford-Empire* case, and we are free to consider whether that case should be followed under the facts and circumstances here presented.

In the *Hartford-Empire* case the Court stressed the fact that Congress had not specifically authorized for-

¹ "That a patent is property, protected against appropriation both by individuals and by government, has long been settled. In recognition of this quality of a patent the courts, in enjoining violations of the Sherman Act arising from the use of patent licenses, agreements, and leases, have abstained from action which amounted to a forfeiture of the patents."

"The Government urges that such forfeiture is justified by our recent decisions. . . . But those cases merely apply the doctrine that, so long as the patent owner is using his patent in violation of the antitrust laws, he cannot restrain infringement of it by others. We were not there concerned with the problem whether, when a violation of the antitrust laws was to be restrained and discontinued, the court could, as part of the relief, forfeit the patents of those who had been guilty of the violation. Lower federal courts have rightly refused to extend the doctrine of those cases to antitrust decrees by inserting forfeiture provisions." 323 U. S. pp. 415-416.

² He, indeed, stated on argument of a motion to determine reasonable royalties: "I would have liked to go along on the question of royalty-free patents, but I felt that I hadn't been given the green light on that."

³ The *Hartford-Empire* decision was four to two on this point.

feiture of patents in antitrust actions. It thought that "if, as we must assume on this record, a defendant owns valid patents, it is difficult to say that, however much in the past such defendant has abused the rights thereby conferred, it must now dedicate them to the public." 323 U. S. p. 415. The difficulty with that argument is that it proves too much. For the Court was at the same time sanctioning compulsory licensing, a most serious inroad on patent rights. The patent law gives to the patentee or his assignee the "exclusive right to make, use, and vend the invention or discovery." R. S. § 4884, 35 U. S. C. § 40. If the antitrust court could not interfere with patent rights, then it could not order licensing on any terms, for mandatory licensing is hardly consistent with exclusive rights. Again, if the failure of Congress specifically so to provide prevents a court from directing royalty-free licensing, then by the same token the failure to provide for compulsory licensing is a bar to that relief also.

It is thus clear that the criterion for choosing the appropriate antitrust remedies cannot be found in Congressional silence. The task of putting an end to monopolistic practices and restoring competition is one of magnitude and complexity; Congress has authorized use of the broadest powers of equity to cope with it. Under a statute providing more detailed remedies than do the antitrust laws, we have held that an equity court may mould additional ones. See *Porter v. Warner Holding Co.*, 328 U. S. 395. And its powers under the antitrust laws, though not specifically enumerated, are ample to thwart the plans of those who would build illegal empires, no matter how imaginative their undertakings or subtle their techniques. The power of the court is not limited to the restraint of future transgressions. The impairment of property rights is no barrier to the fashioning of a decree which will grant effective relief. *United States*

v. *Union Pacific R. Co.*, 226 U. S. 470, 476-477. Divestiture or dissolution may be ordered in spite of hardship, inconvenience, or loss. *United States v. Crescent Amusement Co.*, 323 U. S. 173, 189. Devices or instrumentalities which may be used for legitimate ends may nevertheless be outlawed entirely where they have been employed to build the monopoly or to create the restraint of trade. *United States v. Crescent Amusement Co.* *supra*, pp. 187-188. For the aim of the decree is not only to prevent a repetition of the unlawful practice but to undo what was done, to neutralize power unlawfully acquired, to prevent the defendants from acquiring any of the fruits of the condemned project. *Standard Oil Co. v. United States*, 221 U. S. 1, 78.

If that is to be done here, I think we must do more than forbid further expansion of the existing monopolistic situation. The defendants have unlawfully acquired control and domination over this industry to the exclusion of competitors. This control was obtained in part through the unlawful acquisition and use of patents. As stated by the District Court, "These patents, through the agreements in which they are enmeshed and the manner in which they have been used, have, in fact, been forged into instruments of domination of an entire industry. The net effect is that a business, originally founded upon patents which have long since expired, is today less accessible to free enterprise than when it was first launched." 63 F. Supp. 513, 532. If defendants are allowed royalties on those patents, they do, indeed, reap dividends from their unlawful activities. As stated in a dissent in the *Hartford-Empire* case, "Every dollar hereafter, as well as heretofore, secured from licenses on the patents illegally aggregated in the combination's hands is money to which the participants are not entitled by virtue of the patent laws or others. It is the immediate product of the conspiracy." 323 U. S. p. 443.

But beyond that is the effect on the industry. Here defendants have been in a commanding and impregnable position. They have dominated the field and suppressed competition. If competition is to be restored strong measures must be adopted to provide the maximum opportunity for new ventures to compete with the established giants of the industry. It is here that the major vice of permitting royalties on the licensed patents becomes apparent. Each dollar of royalty adds a dollar to the costs of the new competitor and gives the established licensor another dollar with which to fight that competition. As stated by National Lead in its brief before this Court:

"National and du Pont not only compete with their licensees but dominate the titanium industry. A requirement of ~~uniform~~ reasonable royalties in no way frees competition because, no matter what the royalty may be, *in this industry* a licensee required to pay more than its licensor will be at a competitive disadvantage."

"Compulsory licensing alone would not be enough to restore the industry to a healthy, competitive condition. If National and du Pont are permitted to receive royalties on their existing patents, they will still be in position to dominate the industry."

If National Lead, the world's largest producer of titanium pigments, expects to find itself at a competitive disadvantage as a result of reasonable royalty licenses, what can be the probable fate of newcomers or existing independents of small stature?

It must be remembered that one of the consequences of the unhealthy monopolistic condition in the industry has been a dearth of the ordinary patent litigation. The burden of testing potentially invalid patents will thus be placed on the first enterprise unwilling to pay the royalties.

The decree approved by the Court stops short of granting effective relief. Divestiture is refused. Compulsory licensing is ordered, but only to those who are willing reciprocally to license use by the defendants of their patents. In this additional respect the decree will enable the large established companies to strengthen their dominant position. To get the benefits of the decree an independent must give up one of his few competitive advantages—the exclusive right to use such patents as he may possess. These provisions, plus the additional requirement of royalties on the misused patents, even though those royalties be “reasonable,” greatly increase the odds against restoration of competition in this industry.

Except as to the matters mentioned, I join in the opinion of the Court.